CHAPTER 33-24-02
IDENTIFICATION AND LISTING OF HAZARDOUS WASTE

33-24-02-01. Purpose and scope.

1. This chapter identifies those solid wastes which are subject to regulation as hazardous wastes and which are subject to the notification requirements. In this chapter:

   a. Sections 33-24-02-01 through 33-24-02-07 define the terms "solid waste" and "hazardous waste", identify those wastes which were excluded from regulation under chapters 33-24-03 through 33-24-07, and establish special management requirements for hazardous waste produced by conditionally exempt small quantity generators and hazardous waste which is recycled.

   b. Sections 33-24-02-08 and 33-24-02-09 set forth the criteria used to identify characteristics of hazardous waste and to list particular hazardous waste.

c. Sections 33-24-02-10 through 33-24-02-14 identify characteristics of hazardous waste.

d. Sections 33-24-02-15 through 33-24-02-18 list particular hazardous wastes.

2. The definition of solid waste contained in this chapter:

a. Applies only to wastes that also are hazardous for purposes of the rules implementing North Dakota Century Code chapter 23-20.3. For example, it does not apply to materials (such as nonhazardous scrap, paper, textiles, or rubber) that are not otherwise hazardous wastes and that are recyclable.

b. This chapter identifies only some of the materials which are solid wastes and hazardous wastes under North Dakota Century Code chapter 23-20.3. A material which is not defined as a solid waste in this chapter or is not a hazardous waste identified or listed in this chapter, is still a solid waste and a hazardous waste for purposes of these sections if:

(1) In the case of North Dakota Century Code section 23-20.3-06, the department has reason to believe that the material may be a hazardous waste within the meaning of subsection 5 of North Dakota Century Code section 23-20.3-02; or

(2) In the case of North Dakota Century Code section 23-20.3-08, the statutory elements are established.

3. For the purpose of sections 33-24-02-02 and 33-24-02-06:

a. A "spent material" is any material that has been used and as a result of contamination can no longer serve the purpose for which it was produced without processing.

b. "Sludge" has the same meaning used in section 33-24-01-04.

c. A "byproduct" is a material that is not one of the primary products of a production process and is not solely or separately produced by the production process. Examples are process residue, such as slags or distillation column bottoms. The term does not include a coproduct that is produced for the general public's use and is ordinarily used in the form it is produced by the process.

d. A material is "reclaimed" if it is processed to recover a usable product, or if it is regenerated. Examples are recovery of lead values from spent batteries and regeneration of spent solvents.

e. A material is "used or reused" if it is either:

(1) Employed as an ingredient (including use as an intermediate) in an industrial process to make a product (for example, distillation bottoms from one process used as feedstock in another process). However, a material will not satisfy this condition if distinct components of the material are recovered as separate end products (as when metals are recovered from metal containing secondary materials); or

(2) Employed in a particular function or application as an effective substitute for a commercial product (for example, spent pickle liquor used as phosphorous precipitant and sludge conditioner or in wastewater treatment).

f. "Scrap metal" is bits and pieces of metal parts (for example, bars, turnings, rods, sheets, wire) or metal pieces that may be combined together with bolts or soldering (for example, radiators, scrap automobiles, railroad boxcars), which when worn or superfluous can be recycled.

g. A material is "recycled" if it is used, reused, or reclaimed.

h. A material is "accumulated speculatively" if it is accumulated before being recycled. A material is not accumulated speculatively, however, if the person accumulating it can show that the material is potentially recyclable and has a feasible means of being recycled; and that during the calendar year (commencing on January first) the amount of material that is recycled, or transferred to a different site for recycling, equals at least seventy-five percent by weight or volume of the amount of that material accumulated at the beginning of the period. In calculating the percentage of turnover, the seventy-five percent requirement is to be applied to each material of the same type (for example, slags from a single smelting process) that is recycled in the same way (for example, from which the same material is recovered or that is used in the same way). Material accumulating in units that would be exempt from regulation under subsection 3 of section 33-24-02-04 are not to be included in making the calculation. (Materials that are already defined as solid wastes also are not to be included in making the calculation.) Materials are no longer in this category once they are removed from accumulation for recycling, however.

i. "Excluded scrap metal" is processed scrap metal, unprocessed home scrap metal, and unprocessed prompt scrap metal.

j. "Home scrap metal" is scrap metal as generated by steel mills, foundries, and refineries such as turnings, cuttings, punchings, and borings.

k. "Processed scrap metal" is scrap metal which has been manually or physically altered to either separate it into distinct materials to enhance economic value or to improve the handling of materials. Processed scrap metal includes scrap metal which has been baled, shredded, sheared, chopped, crushed, flattened, cut, melted, or separated by metal type (for example, sorted), and fines, drosses, and related materials which have been agglomerated. (Note: shredded circuit boards being sent for recycling are not considered processed scrap metal. They are covered under the exclusion from the definition of solid waste for shredded circuit boards being recycled (subdivision n of subsection 1 of section 33-24-02-04)).

l. "Prompt scrap metal" is scrap metal as generated by the metal working and fabrication industries and includes such scrap metal as turnings, cuttings, punchings, and borings. Prompt scrap metal is also known as industrial or new scrap metal.

History: Effective January 1, 1984; amended effective October 1, 1986; December 1, 1988; July 1, 1997; December 1, 2003.
General Authority: NDCC 23-20.3-03
Law Implemented: NDCC 23-20.3-03, 23-20.3-04

33-24-02-02. Definition of solid waste.

1. A solid waste is:

   a. Any discarded material that is not excluded by subsection 1 of section 33-24-02-04 or that is not excluded by variance granted under sections 33-24-01-09 and 33-24-01-10.

   b. A discarded material is any material which is:

      (1) Abandoned, as explained in subsection 2;

      (2) Recycled, as explained in subsection 3;

      (3) Considered inherently wastelike, as explained in subsection 4; or

      (4) A military munition identified as a solid waste in section 33-24-05-822.

2. Materials are solid wastes if they are abandoned by being:

   a. Disposed of;

   b. Burned or incinerated; or

c. Accumulated, stored, or treated (but not recycled) before or in lieu of being abandoned by being disposed of, burned, or incinerated.

3. Materials are solid wastes if they are recycled or accumulated, stored, or treated before recycling as specified in subdivisions a through d.

a. Used in a manner constituting disposal.

(1) Materials noted with a "*" in column 1 of table 1 are solid wastes when they are:

(a) Applied to or placed on the land in a manner that constitutes disposal; or

(b) Used to produce products that are applied to or placed on the land or are otherwise contained in products that are applied to or placed on the land (in which case the product itself remains a solid waste).

(2) However, commercial chemical products listed in section 33-24-02-18 are not solid wastes if they are applied to the land and that is their ordinary manner of use.

b. Burning for energy recovery.

(1) Materials noted with a "*" in column 2 of table 1 are solid wastes when they are:

(a) Burned to recover energy; or

(b) Used to produce a fuel or are otherwise contained in fuels (in which case the fuel itself remains a solid waste).

(2) However, commercial chemical products listed in section 33-24-02-18 are not solid wastes if they are themselves fuels.

c. Reclaimed. Materials noted with a "*" in column 3 of table 1 are solid wastes when reclaimed (except as provided by subdivision q of subsection 1 of section 33-24-02-04). Materials noted with a "-" in column 3 of table 1 are not solid wastes when reclaimed.

d. Accumulated speculatively. Materials noted with a "*" in column 4 of table 1 are solid wastes when accumulated speculatively.

4. Inherently wastelike materials. The following materials are solid wastes when they are recycled in any manner:

a. Hazardous waste numbers F020, F021 (unless used as an ingredient to make a product at the site of generation), F022, F023, F026, and F028.

b. Secondary materials fed to a halogen acid furnace that exhibit a characteristic of a hazardous waste or are listed as a hazardous waste as defined in sections 33-24-02-10 through 33-24-02-19, except for brominated material that meets the following criteria:

(1) The material must contain a bromine concentration of at least forty-five percent;

(2) The material must contain less than a total of one percent of toxic organic compounds listed in appendix V of chapter 33-24-02; and

(3) The material is processed continually onsite in the halogen acid furnace via direct conveyance (hard piping).

c. The department will use the following criteria to add wastes to that list:

(1) The materials:

(a) Are ordinarily disposed of, burned, or incinerated; or

(b) Contain toxic constituents listed in appendix V of chapter 33-24-02 and these constituents are not ordinarily found in raw materials or products for which the materials substitute (or are found in raw materials or products in smaller concentrations) and are not used or reused during the recycling process; and

(2) The material may pose a substantial hazard to human health and the environment when recycled.

5. Materials that are not solid waste when recycled:

a. Materials are not solid waste when they can be shown to be recycled by being:

(1) Used or reused as ingredients in an industrial process to make a product provided the materials are not being reclaimed;

(2) Used or reused as effective substitutes for commercial products; or

(3) Returned to the original process from which they are generated, without first being reclaimed or land disposed. The material must be returned as a substitute for feedstock materials. If the original process to which the material is returned is a secondary process, the materials must be managed such that there is no placement on the land. If the materials are generated and reclaimed within the primary mineral processing industry, the conditions of the exclusion found at subdivision q of subsection 1 of section 33-24-02-04 apply rather than this paragraph.

b. The following materials are solid wastes, even if the recycling involves use, reuse, or return to the original process (described in paragraphs 1 through 3 of subdivision a):

(1) Materials used in a manner constituting disposal, or used to produce products that are applied to the land;

(2) Materials burned for energy recovery, used to produce a fuel, or contained in fuels;

(3) Materials accumulated speculatively; or

(4) Materials listed in subdivisions a and b of subsection 4.

6. Documentation of claims that materials are not solid wastes or are conditionally exempt from regulation. Respondents in actions to enforce regulations implementing North Dakota Century Code chapter 23-20.3 who raise a claim that a certain material is not a solid waste, or is conditionally exempt from regulation, must demonstrate that there is a known market or disposition for the material, and that they meet the terms of exclusion or exemption. In doing so, they must provide appropriate documentation (such as contracts showing that a second person uses the material as an ingredient in a production process) to demonstrate that the material is not a waste, or is exempt from the regulation. In addition, owners or operators of facilities claiming that they actually are recycling materials must show that they have the necessary equipment to do so.

TABLE 1

	Use Constituting Disposal Subdivision a of Subsection 3 of Section 33-24-02-02 (1)	Energy Recovery/Fuel Subdivision b of Subsection 3 of Section 33-24-02-02 (2)	Reclamation Subdivision c of Subsection 3 of Section 33-24-02-02[1] (3)	Speculative Accumulation Subdivision d of Subsection 3 of Section 33-24-02-02 (4)
Spent materials	(*)	(*)	(*)	(*)

Sludges (listed in Section 33-24-02-16 or Section 33-24-02-17 of Chapter 33-24-02)	(*)	(*)	(*)	(*)
Sludges exhibiting a characteristic of hazardous waste	(*)	(*)	-	(*)
Byproducts (listed in Section 33-24-02-16 or Section 33-24-02-17 of Chapter 33-24-02)	(*)	(*)	(*)	(*)
Byproducts exhibiting a characteristic of hazardous waste	(*)	(*)	-	(*)
Commercial chemical products (listed in Section 33-24-02-18 of Chapter 33-24-02	(*)	(*)	-	-
Scrap metal other than excluded scrap metal (see Subdivision i of Subsection 3 of Section 33-24-02-01)	(*)	(*)	(*)	(*)
[1]Except as provided by Subdivision q of Subsection 1 of Section 33-24-02-04 for mineral processing secondary materials. Note - The terms "spent materials", "sludges", "byproducts", "scrap metal", and "processed scrap metal" are defined in Section 33-24-02-01.				

History: Effective January 1, 1984; amended effective October 1, 1986; December 1, 1988; January 1, 1994; July 1, 1997; December 1, 2003.
General Authority: NDCC 23-20.3-03
Law Implemented: NDCC 23-20.3-03, 23-20.3-04

33-24-02-03. Definition of hazardous waste.

1. A solid waste, as defined in section 33-24-02-02, is a hazardous waste if:

   a. It is not excluded from regulation as a hazardous waste under subsection 2 of section 33-24-02-04; and

   b. It meets any of the following criteria:

      (1) It exhibits any of the characteristics of hazardous waste identified in sections 33-24-02-10 through 33-24-02-14. However, any mixture of a waste from the extraction, beneficiation, and processing of ores and minerals excluded under subdivision g of subsection 2 of section 33-24-02-04 and any other solid waste exhibiting a characteristic of hazardous waste under sections 33-24-02-10 through 33-24-02-14 is a hazardous waste only if it exhibits a characteristic that would not have been exhibited by the excluded waste alone if such mixture had not occurred or

if it continues to exhibit any of the characteristics exhibited by the nonexcluded wastes prior to mixture. Further, for the purposes of applying the toxicity characteristic to such mixtures, the mixture is also a hazardous waste if it exceeds the maximum concentration for any contaminant listed in table 1 to section 33-24-02-14 that would not have been exceeded by the excluded waste alone if the mixture had not occurred or if it continues to exceed the maximum concentration for any contaminant exceeded by the nonexempt waste prior to the mixture.

(2) It is listed in this chapter and has not been excluded from the lists in this chapter under sections 33-24-01-06 and 33-24-01-08.

(3) [Reserved]

(4) It is a mixture of solid waste and one or more hazardous wastes listed in sections 33-24-02-15 through 33-24-05-22 and has not been excluded from this subdivision under sections 33-24-01-06 and 33-24-01-08, or subsection 7 or 8; however, the following mixtures of solid wastes and hazardous wastes listed in sections 33-24-02-15 through 33-24-02-22 are not hazardous wastes (except by application of paragraph 1 or 2 of subdivision b) if the generator can demonstrate that the mixture consists of wastewater the discharge of which is subject to regulation under subsections 18 and 19, or subsection 25 of North Dakota Century Code section 61-28-04 (including wastewater at the facilities which have eliminated the discharge of wastewater) and:

(a) One or more of the following spent solvents listed in section 33-24-02-16 - carbon tetrachloride, tetrachloroethylene, trichloroethylene - provided that the maximum total weekly usage of these solvents (other than the amounts that can be demonstrated not to be discharged to wastewater) divided by the average weekly flow of wastewater into the headworks of the facility's wastewater treatment or pretreatment system does not exceed one part per million;

(b) One or more of the following spent solvents listed in section 33-24-02-16 - methylene chloride, 1,1,1-trichloroethane, chlorobenzene, o-dichlorobenzene, cresols, cresylic acid, nitrobenzene, toluene, methyl ethyl ketone, carbon disulfide, isobutanol, pyridine, spent chlorofluorocarbon solvents - provided that the maximum total weekly

usage of these solvents (other than the amounts that can be demonstrated not to be discharged to wastewater) divided by the average weekly flow of wastewater into the headworks of the facility's wastewater treatment or pretreatment system does not exceed twenty-five parts per million;

(c) One of the following wastes listed in section 33-24-02-17, provided that the wastes are discharged to the refinery oil recovery sewer before primary oil/water/solids separation - heat exchanger bundle cleaning sludge from the petroleum refining industry (hazardous waste number K050), crude oil storage tank sediment from petroleum refining operations (hazardous waste number K169), clarified slurry oil tank sediment or in-line filter/separation solids, or both, from petroleum refining operations (hazardous waste number K170), spent hydrotreating catalyst (hazardous waste number K171), and spent hydrorefining catalyst (hazardous waste number K172);

(d) A discarded chemical commercial product, or chemical intermediate listed in section 33-24-02-18, arising from de minimus losses of these materials from manufacturing operations in which these materials are used as raw materials or are produced in the manufacturing process. For purposes of this subparagraph, "de minimus" losses include those from normal material handling operations, e.g., spills from the unloading or transfer of materials from bins or other containers and leaks from pipes, valves, or other devices used to transfer materials; minor leaks of process equipment, storage tanks or containers; leaks from well-maintained pump packings and seals; sample purgings; relief device discharges; discharges from safety showers and rinsing and cleaning of personal safety equipment; and rinsate from empty containers or from containers that are rendered empty by that rinsing;

(e) Wastewater resulting from laboratory operations containing toxic (T) wastes listed in sections 33-24-02-15 through 33-24-02-19, provided that the annualized average flow of laboratory wastewater does not exceed one percent of total wastewater flow into the headworks of the facility's wastewater treatment or pretreatment system, or provided the wastes combined annualized average concentration does not exceed one part per million in the headworks

of the facility's wastewater treatment or pretreatment facility. Toxic (T) wastes used in laboratories that are demonstrated not to be discharged to wastewater are not to be included in this calculation;

(f) One or more of the following wastes listed in section 33-24-02-17 - wastewaters from the production of carbamates and carbamoyl oximes (hazardous waste number K157) - provided that the maximum weekly usage of formaldehyde, methyl chloride, methylene chloride, and triethylamine (including all amounts that cannot be demonstrated to be reacted in the process, destroyed through treatment, or is recovered, that is, what is discharged or volatilized) divided by the average weekly flow of process wastewater prior to any dilutions into the headworks of the facility's wastewater treatment system does not exceed a total of five parts per million by weight; or

(g) Wastewaters derived from the treatment of one or more of the following wastes listed in section 33-24-02-17 - organic waste (including heavy ends, still bottoms, light ends, spent solvents, filtrates, and decantates) from the production of carbamates and carbamoyl oximes (hazardous waste number K156) - provided, that the maximum concentration of formaldehyde, methyl chloride, methylene chloride, and triethylamine prior to any dilutions into the headworks of the facility's wastewater treatment system does not exceed a total of five milligrams per liter.

(5) Rebuttable presumption for used oil. Used oil containing more than one thousand parts per million total halogens is presumed to be a hazardous waste because it has been mixed with halogenated hazardous waste listed in sections 33-24-02-15 through 33-24-02-19. Persons may rebut this presumption by demonstrating that the used oil does not contain hazardous waste (for example, by using an analytical method from environmental protection agency publication SW-846, as referenced in section 33-24-01-05, to show that the used oil does not contain significant concentrations of halogenated hazardous constituents listed in appendix V of chapter 33-24-02).

(a) The rebuttable presumption does not apply to metalworking oils or fluids, or both, containing chlorinated paraffins, if they are processed, through a tolling agreement, to reclaim metalworking oils or fluids, or both. The presumption does apply to metalworking

oils or fluids, or both, if such oils or fluids, or both, are recycled in any other manner, or disposed.

(b) The rebuttable presumption does not apply to used oils contaminated with chlorofluorocarbons removed from refrigeration units where the chlorofluorocarbons are destined for reclamation. The rebuttable presumption does apply to used oils contaminated with chlorofluorocarbons that have been mixed with used oil from sources other than refrigeration units.

2. A solid waste which is not excluded from regulation under subdivision a of subsection 1 becomes a hazardous waste when any of the following events occur:

a. In the case of a waste listed in this chapter, when the waste first meets the listing description set forth in this chapter.

b. In the case of a mixture of solid waste and one or more listed hazardous wastes, when a hazardous waste listed in this chapter is first added to the solid waste.

c. In the case of any other waste (including a waste mixture), when the waste exhibits any of the characteristics identified in this chapter.

3. Unless and until it meets the criteria of subsection 4:

a. A hazardous waste will remain a hazardous waste.

b. Except as otherwise provided in paragraph 2:

(1) Except as otherwise provided in paragraph 2, or subsection 7 or 8, any solid waste generated from the treatment, storage, or disposal of a hazardous waste, including any sludge, spill residue, ash, emission control dust, or leachate (but not including precipitation runoff) is a hazardous waste. (However, materials that are reclaimed from solid wastes and that are used beneficially are not solid wastes and hence are not hazardous wastes under this provision unless the reclaimed material is burned for energy recovery or used in a manner constituting disposal.)

(2) The following solid wastes are not hazardous even though they are generated from the treatment, storage, or disposal of a hazardous waste, unless they exhibit one or more of the characteristics of hazardous waste:

(a) Waste pickle liquor sludge generated by lime stabilization of spent pickle liquor from the iron and steel industry (standard industrial codes 331 and 332).

(b) Wastes from burning any of the materials exempted from regulation by paragraphs 3 and 4 of subdivision c of subsection 1 of section 33-24-02-06.

(c) Nonwastewater residue.

[1] Nonwastewater residues, such as slag, resulting from high temperature metals recovery (HTMR) processing of K061, K062, or F006 waste, in units identified as rotary kilns, flame reactors, electric furnaces, plasma arc furnaces, slag reactors, rotary hearth furnace/electric furnace combinations or industrial furnaces (as defined in the definition for "industrial furnace" in section 33-24-01-04), that are disposed in solid waste management units, provided that these residues meet the generic exclusion levels identified in the tables in this paragraph for all constituents, and exhibit no characteristics of hazardous waste. Testing requirements must be incorporated in a facility's waste analysis plan or a generator's self-implementing waste analysis plan; at a minimum, composite samples of residues must be collected and analyzed quarterly or when the process or operation generating the waste changes or both. Persons claiming this exclusion in an enforcement action will have the burden of proving by clear and convincing evidence that the material meets all of the exclusion requirements.

Constituent	Maximum for Any Single Composite Sample - Toxicity Characteristic Leaching Procedure (mg/l)
Generic exclusion levels for K061 and K062 nonwastewater high temperature metals recovery residues	
Antimony	0.10
Arsenic	0.50
Barium	7.6
Beryllium	0.010
Cadmium	0.050
Chromium (total)	0.33
Lead	0.15

Mercury	0.009
Nickel	1.0
Selenium	0.16
Silver	0.30
Thallium	0.020
Zinc	70
Generic exclusion levels for F006 nonwastewater high temperature metals recovery residues	
Antimony	0.10
Arsenic	0.50
Barium	7.6
Beryllium	0.010
Cadmium	0.050
Chromium (total)	0.33
Cyanide (total) (mg/kg)	1.8
Lead	0.15
Mercury	0.009
Nickel	1.0
Selenium	0.16
Silver	0.30
Thallium	0.020
Zinc	70

[2] A one-time notification and certification must be placed in the facility's files and sent to the department for K061, K062, or F006 high temperatures metal recovery residues that meet the generic exclusion levels for all constituents and do not exhibit any characteristics that are sent to solid waste management units. The notification and certification that is placed in the generators or treaters files must be updated if the process or operation generating the waste changes or if the solid waste management unit receiving the waste changes. However, the generator or treater need only notify the department on an annual basis if such changes occur. Such notification and certification should be sent to the department by the end of the calendar year, but no later than December thirty-first. The notification must include the following information: the name and

address of the solid waste management unit receiving the waste shipments; the hazardous waste numbers and treatability groups at the initial point of generation; and, the treatment standards applicable to the waste at the initial point of generation. The certification must be signed by an authorized representative and must state as follows: "I certify under penalty of law that the generic exclusion levels for all constituents have been met without impermissible dilution and that no characteristic of hazardous waste is exhibited. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment."

(d) Biological treatment sludge from the treatment of one of the following wastes listed in section 33-24-02-17 - organic waste (including heavy ends, still bottoms, light ends, spent solvents, filtrates, and decantates) from the production of carbamates and carbamoyl oximes (hazardous waste number K156), and wastewaters from the production of carbamates and carbamoyl oximes (hazardous waste number K157).

(e) Catalyst inert support media separated from one of the following wastes listed in section 33-24-02-17, spent hydrotreating catalyst, hazardous waste number K171, and spent hydrorefining catalyst, hazardous waste number K172.

4. Any solid waste described in subsection 3 is not a hazardous waste if it meets the following criteria:

a. In the case of any solid waste, it does not exhibit any of the characteristics of hazardous waste identified in sections 33-24-02-10 through 33-24-02-14. (However, wastes that exhibit a characteristic at the point of generation may still be subject to the requirements of sections 33-24-05-250 through 33-24-05-299, even if they no longer exhibit a characteristic at the point of land disposal.); or

b. In the case of a waste which is a listed waste under this chapter, contains a waste listed in this chapter or is derived from a waste listed in this chapter, it also has been excluded from subsection 3 under sections 33-24-01-06 and 33-24-01-08.

5. Notwithstanding subsections 1 through 4 and provided the debris as defined in sections 33-24-05-250 through 33-24-05-299 does not exhibit a characteristic identified at sections 33-24-05-210 through

33-24-05-214, the following materials are not subject to regulation under chapter 33-24-01, 33-24-02, 33-24-03, 33-24-04, 33-24-05, or 33-24-06:

a. Hazardous debris as defined in sections 33-24-05-250 through 33-24-05-299 that has been treated using one of the required extraction or destruction technologies specified in table 1 of section 33-24-05-285; persons claiming this exclusion in an enforcement action will have the burden of proving by clear and convincing evidence that the material meets all of the exclusion requirements; or

b. Debris as defined in sections 33-24-05-250 through 33-24-05-299 that the department, considering the extent of contamination, has determined is no longer contaminated with hazardous waste.

6. [Reserved]

7. A hazardous waste that is listed in sections 33-24-02-15 through 33-24-02-22 solely because it exhibits one or more characteristics of ignitability as defined under section 33-24-02-11, corrosivity as defined under section 33-24-02-12, or reactivity as defined under section 33-24-02-13 is not a hazardous waste, if the waste no longer exhibits any characteristic of hazardous waste identified in sections 33-24-02-10 through 33-24-02-14.

   a. The exclusion described in this subsection also pertains to:

      (1) Any mixture of a solid waste and a hazardous waste listed in sections 33-24-02-15 through 33-24-02-22 solely because it exhibits the characteristics of ignitability, corrosivity, or reactivity as regulated under paragraph 4 of subdivision b of subsection 1; and

      (2) Any solid waste generated from treating, storing, or disposing of a hazardous waste listed in sections 33-24-02-15 through 33-24-02-22 solely because it exhibits the characteristics of ignitability, corrosivity, or reactivity as regulated under paragraph 1 of subdivision b of subsection 3.

   b. Wastes excluded under this subsection are subject to the land disposal restrictions in sections 33-24-05-250 through 33-24-05-299, as applicable, even if the wastes no longer exhibit a characteristic at the point of land disposal.

   c. Any mixture of a solid waste excluded from regulation under subdivision g of subsection 2 of section 33-24-02-04 and a hazardous waste listed in sections 33-24-02-15 through 33-24-02-19 solely because it exhibits one or more of the

characteristics of ignitability, corrosivity, or reactivity as regulated under paragraph 4 of subdivision b of subsection 1 is not a hazardous waste, if the mixture no longer exhibits any characteristic of hazardous waste identified in sections 33-24-02-10 through 33-24-02-14 for which the hazardous waste listed in sections 33-24-02-15 through 33-24-02-19 was listed.

8. Hazardous waste containing radioactive waste is no longer a hazardous waste when it meets the eligibility criteria and conditions of sections 33-24-05-850 through 33-24-05-949 "eligible radioactive mixed waste".

   a. The exemption described in this subsection also pertains to:

      (1) Any mixture of a solid waste and an eligible radioactive mixed waste; and

      (2) Any solid waste generated from treating, storing, or disposing of an eligible radioactive mixed waste.

   b. Waste exempted under this subsection must meet the eligibility criteria and specified conditions in sections 33-24-05-856 and 33-24-05-857, for storage and treatment, and in sections 33-24-05-890 and 33-24-05-895, for transportation and disposal. Waste that fails to satisfy these eligibility criteria and conditions is regulated as hazardous waste.

History: Effective January 1, 1984; amended effective October 1, 1986; December 1, 1988; December 1, 1991; January 1, 1994; July 1, 1997; December 1, 2003.
General Authority: NDCC 23-20.3-03
Law Implemented: NDCC 23-20.3-03, 23-20.3-04

33-24-02-04. Exclusions.

1. **Materials that are not solid wastes.** The following materials are not solid wastes for the purpose of this chapter:

   a. Domestic sewage and any mixture of domestic sewage and other wastes that pass through a sewer system to a publicly owned treatment works for treatment. "Domestic sewage" means untreated sanitary wastes that pass through a sewer system.

   b. Industrial wastewater discharges that are point source discharges subject to regulation under subsections 18 and 19 of North Dakota Century Code section 61-28-04. (Comment: This exclusion applies only to the actual point source discharge. It does not exclude industrial wastewaters while they are being collected, stored, or treated before discharge, nor does it exclude sludges that are generated by industrial wastewater treatment.)

c. Irrigation return flows.

d. Source, special nuclear, or byproduct material as defined by the Atomic Energy Act of 1954, as amended [42 U.S.C. 2011 et seq.].

e. Materials subjected to in situ mining techniques which are not removed from the ground as part of the extraction process.

f. Pulping liquors (for example, black liquor) that are reclaimed in a pulping liquor recovery furnace and then reused in the pulping process, unless it is accumulated speculatively as defined in subsection 3 of section 33-24-02-01.

g. Spent sulfuric acid used to produce virgin sulfuric acid, unless it is accumulated speculatively as defined in subsection 3 of section 33-24-02-01.

h. Secondary materials that are reclaimed and returned to the original process or processes in which they were generated where they are reused in the production process provided:

(1) Only tank storage is involved, and the entire process through completion of reclamation is closed by being entirely connected with pipes or other comparable enclosed means of conveyance;

(2) Reclamation does not involve controlled flame combustion (such as occurs in boilers, industrial furnaces, or incinerators);

(3) The secondary materials are never accumulated in such tanks for over twelve months without being reclaimed; and

(4) The reclaimed material is not used to produce a fuel, or used to produce products that are used in a manner constituting disposal.

i. Wood preserving:

(1) Spent wood preserving solutions that have been reclaimed and are reused for their original intended purpose; and

(2) Wastewaters from the wood preserving process that have been reclaimed and are reused to treat wood.

(3) Prior to reuse, the wood preserving wastewaters and spent wood preserving solutions described in paragraphs 1 and 2, so long as they meet all of the following conditions:

(a) The wood preserving wastewaters and spent wood preserving solutions are reused onsite at waterborne plants in the production process for their original intended purpose;

(b) Prior to reuse, the wastewaters and spent wood preserving solutions are managed to prevent release to either land or ground water or both;

(c) Any unit used to manage wastewaters and spent wood preserving solutions, or both, prior to reuse can be visually or otherwise determined to prevent such releases;

(d) Any drip pad used to manage the wastewaters and spent wood preserving solutions, or both, prior to reuse complies with the applicable standards in subsection 5 of section 33-24-06-16, regardless of whether the plant generates a total of less than one hundred kilograms per month of hazardous waste; and

(e) Prior to operating pursuant to this exclusion, the plant owner or operator submits to the department a one-time notification stating that the plant intends to claim the exclusion, giving the date on which the plant intends to begin operating under the exclusion, and containing the following language:

> "I have read the applicable regulation establishing an exclusion for wood preserving wastewaters and spent wood preserving solutions and understand it requires me to comply at all times with the conditions set out in the regulation."

The plant must maintain a copy of that document in its onsite records for a period of no less than three years from the date specified in the notice. The exclusion applies only so long as the plant meets all of the conditions. If the plant goes out of compliance with any condition, it may apply to the department for reinstatement. The department may reinstate the exclusion upon finding that the plant has returned to compliance with all conditions and that violations are not likely to recur.

j. Hazardous waste numbers K060, K087, K141, K142, K143, K144, K145, K147, and K148, and any wastes from the coke byproducts processes that are hazardous only because they exhibit the toxicity characteristic specified in section 33-24-02-14 when, subsequent

to generation, these materials are recycled to coke ovens, to the tar recovery process as a feedstock to produce coal tar, or mixed with coal tar prior to the tar's sale or refining. This exclusion is conditioned on there being no land disposal of the wastes from the point they are generated to the point they are recycled to coke ovens or tar recovery or refining processes, or mixed with coal tar.

k. Nonwastewater splash condenser dross residue from the treatment of K061 in high temperature metals recovery units, provided it is shipped in drums (if shipped) and not land disposed before recovery.

l. Materials considered:

(1) Oil-bearing hazardous secondary materials (for example, sludges, byproducts, or spent materials) that are generated at a petroleum refinery (standard industrial code 2911) and are inserted into the petroleum refining process (standard industrial code 2911 - including, but not limited to, distillation, catalytic cracking, fractionation, or thermal cracking units (for example, cokers)) unless the material is placed on the land, or speculatively accumulated before being so recycled. Materials inserted into thermal cracking units are excluded under this paragraph, provided that the core product also does not exhibit a characteristic of hazardous waste. Oil-bearing hazardous secondary materials may be inserted into the same petroleum refinery where they are generated, or sent directly to another petroleum refinery, and still be excluded under this provision. Except as provided in paragraph 2, oil-bearing hazardous secondary materials generated elsewhere in the petroleum industry (for example, from sources other than petroleum refineries) are not excluded under this paragraph. Residuals generated from processing or recycling materials excluded under paragraph 1, where such materials as generated would have otherwise met a listing under sections 33-24-02-15 through 33-24-02-22, are designated as F037 listed wastes when disposed or intended for disposal.

(2) Recovered oil that is recycled in the same manner and with the same conditions as described in paragraph 1. Recovered oil is oil that has been reclaimed from secondary materials, including wastewater, generated from normal petroleum industry practices, including refining, exploration and production, bulk storage, and transportation incident thereto (standard industrial codes 1311, 1321, 1381, 1382, 1389, 2911, 4612, 4613, 4922, 4923, 4789, 5171, and 5172). Recovered oil does not include oil-bearing hazardous wastes listed in sections 33-24-02-15 through 33-24-02-22;

however, oil recovered from such wastes may be considered recovered oil. Recovered oil does not include used oil as defined in section 33-24-05-600.

m. Excluded scrap metal (processed scrap metal, unprocessed home scrap metal, and unprocessed prompt scrap metal) being recycled.

n. Shredded circuit boards being recycled provided that they are:

(1) Stored in containers sufficient to prevent a release to the environment prior to recovery; and

(2) Free of mercury switches, mercury relays, and nickel-cadmium batteries and lithium batteries.

o. Condensates derived from the overhead gases from kraft mill stream strippers that are used to comply with 40 CFR 63.446(e). The exemption applies only to combustion at the mill generating the condensates.

p. Comparable fuels or comparable syngas fuels (for example, comparable/syngas fuels) that meet the requirements of section 33-24-02-22.

q. Spent materials (as defined in section 33-24-02-01) (other than hazardous wastes listed in sections 33-24-02-15 through 33-24-02-22) generated within the primary mineral processing industry from which minerals, acids, cyanide, water, or other values are recovered by mineral processing, or by beneficiation, provided that:

(1) The spent material is legitimately recycled to recover minerals, acids, cyanide, water, or other values;

(2) The spent material is not accumulated speculatively;

(3) Except as provided in paragraph 4, the spent material is stored in tanks, containers, or buildings meeting the following minimum integrity standards: a building must be an engineered structure with a floor, walls, and a roof all of which are made of nonearthen materials providing structural support (except smelter buildings may have partially earthen floors provided the spent material is stored on the nonearthen portion), and have a roof suitable for diverting rainwater away from the foundation; a tank must be freestanding, not be a surface impoundment (as defined in section 33-24-01-04), and be manufactured of a material suitable for containment of its contents; a container must be freestanding and be manufactured of a material suitable for containment of its

contents. If tanks or containers contain any particulate which may be subject to wind dispersal, the owner or operator must operate these units in a manner which controls fugitive dust. Tanks, containers, and buildings must be designed, constructed, and operated to prevent significant releases to the environment of these materials.

(4) The department may make a site-specific determination, after public review and comment, that only solid mineral processing spent material may be placed on pads, rather than in tanks, containers, or buildings. Solid mineral processing spent materials do not contain any free liquid. The decisionmaker must affirm that pads are designed, constructed, and operated to prevent significant releases of the spent material into the environment. Pads must provide the same degree of containment afforded by the non-Resource Conservation and Recovery Act tanks, containers, and buildings eligible for exclusion.

(a) The decisionmaker must also consider if storage on pads poses the potential for significant releases via ground water, surface water, and air exposure pathways. Factors to be considered for assessing the ground water, surface water, and air exposure pathways are the volume and physical and chemical properties of the spent material, including its potential for migration off the pad; the potential for human or environmental exposure to hazardous constituents migrating from the pad via each exposure pathway; and the possibility and extent of harm to human and environmental receptors via each exposure pathway.

(b) Pads must meet the following minimum standards: be designed of nonearthen material that is compatible with the chemical nature of the mineral processing spent material, capable of withstanding physical stresses associated with placement and removal; have run-on or runoff controls, or both; be operated in a manner which controls fugitive dust; and have integrity assurance through inspections and maintenance programs.

(c) Before making a determination under this paragraph, the department must provide notice and the opportunity for comment to all persons potentially interested in the determination. This can be accomplished by placing notice of this action in major local newspapers or broadcasting notice over local radio stations.

(5) The owner or operator provides notice to the department, providing the following information: the types of materials to be recycled, the type and location of the storage units and recycling processes, and the annual quantities expected to be placed in land-based units. This notification must be updated when there is a change in the type of materials recycled or the location of the recycling process.

(6) For purposes of subdivision g of subsection 2, mineral processing spent materials must be the result of mineral processing and may not include any listed hazardous wastes. Listed hazardous wastes and characteristic hazardous wastes generated by nonmineral processing industries are not eligible for the conditional exclusion from the definition of solid waste.

r. Petrochemical recovered oil from an associated organic chemical manufacturing facility, where the oil is to be inserted into the petroleum refining process (standard industrial code 2911) along with normal petroleum refinery process streams, provided:

(1) The oil is hazardous only because it exhibits the characteristic of ignitability (as defined in section 33-24-02-11) or toxicity for benzene (as defined in section 33-24-02-14, hazardous waste code D018), or both; and

(2) The oil generated by the organic chemical manufacturing facility is not placed on the land, or speculatively accumulated before being recycled into the petroleum refining process. An "associated organic chemical manufacturing facility" is a facility where the primary standard industrial code is 2869, but where operations may also include standard industrial codes 2821, 2822, and 2865; and is physically colocated with a petroleum refinery; and where the petroleum refinery to which the oil being recycled is returned also provides hydrocarbon feedstocks to the organic chemical manufacturing facility. "Petrochemical recovered oil" is oil that has been reclaimed from secondary materials (for example, sludges, byproducts, or spent materials, including wastewater) from normal organic chemical manufacturing operations, as well as oil recovered from organic chemical manufacturing processes.

s. Spent caustic solutions from petroleum refining liquid treating processes used as a feedstock to produce cresylic or naphthenic acid unless the material is placed on the land, or accumulated speculatively as defined in subsection 3 of section 33-24-02-01.

t. Hazardous secondary materials used to make zinc fertilizers, provided that the following conditions specified are satisfied:

(1) Hazardous secondary materials used to make zinc micronutrient fertilizers must not be accumulated speculatively, as defined in subdivision h of subsection 3 of section 33-24-02-01.

(2) Generators and intermediate handlers of zinc-bearing hazardous secondary materials that are to be incorporated into zinc fertilizers must:

(a) Submit a one-time notice to the department, which contains the name, address, and identification number of the generator or intermediate handler facility, provides a brief description of the secondary material that will be subject to the exclusion, and identifies when the manufacturer intends to begin managing excluded, zinc-bearing hazardous secondary materials under the conditions specified in this subdivision.

(b) Store the excluded secondary material in tanks, containers, or buildings that are constructed and maintained in a way that prevents releases of the secondary materials into the environment. At a minimum, any building used for this purpose must be an engineered structure made of nonearthen materials that provide structural support, and must have a floor, walls, and a roof that prevent wind dispersal and contact with rainwater. Tanks used for this purpose must be structurally sound and, if outdoors, must have roofs or covers that prevent contact with wind and rain. Containers used for this purpose must be kept closed except when it is necessary to add or remove material, and must be in sound condition. Containers that are stored outdoors must be managed within storage areas that:

[1] Have containment structures or systems sufficiently impervious to contain leaks, spills, and accumulated precipitation;

[2] Provide for effective drainage and removal of leaks, spills, and accumulated precipitation; and

[3] Prevent run-on into the containment system.

(c) With each offsite shipment of excluded hazardous secondary materials, provide written notice to the receiving facility that the material is subject to the conditions of this subdivision.

(d) Maintain at the generator's or intermediate handler's facility for no less than three years records of all shipments of excluded hazardous secondary materials. For each shipment these records must at a minimum contain the following information:

[1] Name of the transporter and date of the shipment;

[2] Name and address of the facility that received the excluded material, and documentation confirming receipt of the shipment; and

[3] Type and quantity of excluded secondary material in each shipment.

(3) Manufacturers of zinc fertilizers or zinc fertilizer ingredients made from excluded hazardous secondary materials must:

(a) Store excluded hazardous secondary materials in accordance with the storage requirements for generators and intermediate handlers, as specified in subparagraph b of paragraph 2 of subdivision t.

(b) Submit a one-time notification to the department that, at a minimum, specifies the name, address, and identification number of the manufacturing facility, and identifies when the manufacturer intends to begin managing excluded, zinc-bearing hazardous secondary materials under the conditions specified in this subdivision.

(c) Maintain for a minimum of three years records of all shipments of excluded hazardous secondary materials received by the manufacturer, which must at a minimum identify for each shipment the name and address of the generating facility, name of transporter and date the materials were received, the quantity received, and a brief description of the industrial process that generated the material.

(d) Submit to the department an annual report that identifies the total quantities of all excluded hazardous secondary materials that were used to manufacture zinc fertilizers or zinc fertilizer ingredients in the previous year, the name and address of each generating facility, and the industrial process or processes from which they were generated. The annual report shall be submitted by March first of every year.

(4) Nothing in this section preempts, overrides, or otherwise negates the provision in section 33-24-03-02, which requires any person who generates a solid waste to determine if that waste is a hazardous waste.

(5) Interim status and permitted storage units that have been used to store only zinc-bearing hazardous wastes prior to the submission of the one-time notice described in subparagraph a of paragraph 2 of subdivision t, and that afterward will be used only to store hazardous secondary materials excluded under this paragraph, are not subject to the closure requirements of sections 33-24-05-01 through 33-24-05-190, 33-24-05-300 through 33-24-05-524, 33-24-05-550 through 33-24-05-559, and 33-24-05-800 through 33-24-05-891 and the applicable requirements of subsection 5 of section 33-24-06-16.

u. Zinc fertilizers made from hazardous wastes, or hazardous secondary materials that are excluded under subdivision t, provided that:

(1) The fertilizers meet the following contaminant limits:

(a) For metal contaminants:

Constituent	Maximum Allowable Total Concentration in Fertilizer, Per Unit (1 Percent) of Zinc (ppm)
Arsenic	0.3
Cadmium	1.4
Chromium	0.6
Lead	2.8
Mercury	0.3

(b) For dioxin contaminants the fertilizer must contain no more than eight parts per trillion of dioxin, measured as toxic equivalent (TEQ).

(2) The manufacturer performs sampling and analysis of the fertilizer product to determine compliance with the contaminant limits for metals no less than every six months, and for dioxins no less than every twelve months. Testing must also be performed whenever changes occur to manufacturing processes or ingredients that could significantly affect the amounts of contaminants in the fertilizer product. The manufacturer may use any reliable analytical method to demonstrate that no constituent of concern is present in the product at concentrations above the

applicable limits. It is the responsibility of the manufacturer to ensure that the sampling and analysis are unbiased, precise, and representative of the product or products introduced into commerce.

(3) The manufacturer maintains for no less than three years records of all sampling and analyses performed for purposes of determining compliance with the requirements of paragraph 2 of subdivision u. Such records must at a minimum include:

(a) The dates and times product samples were taken and the dates the samples were analyzed;

(b) The names and qualifications of the person taking the samples;

(c) A description of the methods and equipment used to take the samples;

(d) The name and address of the laboratory facility at which analyses of the samples were performed;

(e) A description of the analytical methods used, including any cleanup and sample preparation methods; and

(f) All laboratory analytical results used to determine compliance with the contaminant limits specified in subdivision u.

2. **Solid wastes that are not hazardous wastes.** The following solid wastes are not hazardous wastes:

a. Household waste, including household waste that has been collected, transported, stored, treated, disposed, recovered, for example, refuse-derived fuel, or reused. "Household waste" means any waste material (including garbage, trash, and sanitary wastes in septic tanks) derived from households (including single and multiple residences, hotels, and motels), bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds, and day-use recreation areas). A resource recovery facility managing municipal solid waste may not be deemed to be treating, storing, disposing of, or otherwise managing hazardous wastes for the purpose of regulation under this article, if such facility:

(1) Receives and burns only:

(a) Household waste (from single and multiple dwellings, hotels, motels, and other residential sources); and

(b) Solid waste from commercial or industrial sources that does not contain hazardous waste; and

(2) Such facility does not accept hazardous wastes and the owner or operator of such facility has established contractual requirements or other appropriate notification or inspection procedures to assure that hazardous wastes are not received at or burned in such facility.

b. Solid wastes generated by any of the following and which are returned to the soils as fertilizers:

(1) The growing and harvesting of agricultural crops.

(2) The raising of animals, including animal manures.

c. Mining overburden returned to the minesite.

d. Fly ash waste, bottom ash waste, slag waste, and flue gas emission control waste generated primarily from the combustion of coal or other fossil fuels, except as provided by section 33-24-05-537 for facilities that burn or process hazardous waste.

e. Drilling fluids, produced waters, and other wastes associated with the exploration, development, or production of crude oil, natural gas, or geothermal energy.

f. The following chromium-containing wastes:

(1) Wastes that fail the test for the toxicity characteristic because chromium is present or are listed in this chapter due to the presence of chromium, which do not fail the test for toxicity characteristic for any other constituent or are not listed due to the presence of any other constituent, and which do not fail the test for any other characteristic, if it is shown by a waste generator or by waste generators that:

(a) The chromium in the waste is exclusively (or nearly exclusively) trivalent chromium;

(b) The waste is generated from an industrial process which uses trivalent chromium exclusively (or nearly exclusively) and the process does not generate hexavalent chromium; and

(c) The waste is typically and frequently managed in nonoxidizing environments.

(2) Specific wastes which meet the standard of paragraph 1 (so long as they do not fail the test for the toxicity characteristic for any other constituent, and do not exhibit any other characteristic) are:

(a) Chrome (blue) trimmings, chrome (blue) shavings, sewer screenings, and wastewater treatment sludges, generated by the following subcategories of the leather tanning and finishing industry: hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; retan/wet finish; no beamhouse; through-the-blue; and shearling.

(b) Buffing dust generated by the following subcategories of the leather tanning and finishing industry: hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; retan/wet finish; no beamhouse; and through-the-blue.

(c) Wastewater treatment sludges generated by the following subcategories of the leather tanning and finishing industry: hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; and through-the-blue.

(d) Waste scrap leather from the leather tanning industry, the shoe manufacturing industry, and other leather product manufacturing industries.

(e) Wastewater treatment sludges from the production of TiO_2 pigment using chromium-bearing ores by the chloride process.

g. Solid waste from the extraction, beneficiation, and processing of ores and minerals (including coal, phosphate rock, and overburden from the mining of uranium ore), except as provided by section 33-24-05-537 for facilities that burn or process hazardous waste.

(1) For purposes of this subdivision, beneficiation of ores and minerals is restricted to the following activities: crushing; grinding; washing; dissolution; crystallization; filtration; sorting; sizing; drying; sintering; pelletizing; briquetting; calcining to remove water or carbon dioxide, or both; roasting, autoclaving, or chlorination, or a combination thereof, in preparation for leaching (except when the roasting, autoclaving, or chlorination or a combination thereof, and leaching sequence produces a final or intermediate product that does not undergo further beneficiation or processing); gravity concentration; magnetic separation; electrostatic

separation; flotation; ion exchange; solvent extraction; electrowinning; precipitation; amalgamation; and heap, dump, vat, tank, and in situ leaching.

(2) For the purposes of this subdivision, solid waste from the processing of ores and minerals includes only the following wastes as generated:

(a) Slag from primary copper processing;

(b) Slag from primary lead processing;

(c) Red and brown muds from bauxite refining;

(d) Phosphogypsum from phosphoric acid production;

(e) Slag from elemental phosphorous production;

(f) Gasifier ash from coal gasification;

(g) Process wastewater from coal gasification;

(h) Calcium sulfate wastewater treatment plant sludge from primary copper processing;

(i) Slag tailings from primary copper processing;

(j) Fluorogypsum from hydrofluoric acid production;

(k) Process wastewater from hydrofluoric acid production;

(l) Air pollution control dust or sludge from iron blast furnaces;

(m) Iron blast furnace slag;

(n) Treated residue from roasting or leaching of chrome ore;

(o) Process wastewater from primary magnesium processing by the anhydrous process;

(p) Process wastewater from phosphoric acid production;

(q) Basic oxygen furnace and open hearth furnace air pollution control dust or sludge from carbon steel production;

(r) Basic oxygen furnace and open hearth furnace slag from carbon steel production;

(s) Chloride process waste solids from titanium tetrachloride production; and

(t) Slag from primary zinc processing.

(3) A residue derived from coprocessing mineral processing secondary materials with normal beneficiation raw materials or with normal mineral processing raw materials remains excluded under this subsection if the owner or operator:

(a) Processes at least fifty percent by weight normal beneficiation raw materials or with normal mineral processing raw materials; and

(b) Legitimately reclaims the secondary mineral processing materials.

h. Cement kiln dust waste, except as provided by section 33-24-05-537 for facilities that burn or process hazardous waste.

i. Solid waste that consists of discarded arsenical-treated wood or wood products which fails the test for the toxicity characteristic for hazardous waste codes D004 through D017 and which is not a hazardous waste for any other reason, if the waste is generated by persons who utilize the arsenical-treated wood and wood products for these materials intended end use.

j. Petroleum-contaminated media and debris that fail the test for the toxicity characteristic of section 33-24-02-14 (hazardous waste codes D018 through D043 only) and are subject to the corrective action regulations under chapter 33-24-08.

k. Injected ground water that is hazardous only because it exhibits the toxicity characteristic (hazardous waste codes D018 through D043 only) in section 33-24-02-14 that is reinjected through an underground injection well pursuant to free phase hydrocarbon recovery operations undertaken at petroleum refineries, petroleum marketing terminals, petroleum bulk plants, petroleum pipelines, and petroleum transportation spill sites until January 25, 1993. This extension applies to recovery operations in existence, or for which contracts have been issued, on or before March 25, 1991. For ground water returned through infiltration galleries from such operations at petroleum refineries, marketing terminals, and bulk plants, until October 2, 1991. New operations involving injection wells (beginning after March 25, 1991) will qualify for this compliance date extension (until January 25, 1993) only if:

(1) Operations are performed pursuant to a written state agreement that includes a provision to assess the ground water and the need for further remediation once the free phase recovery is completed; and

(2) A copy of the written agreement has been submitted to Characteristics Section (OS-333), United States Environmental Protection Agency, 401 M Street SW, Washington, D.C. 20460.

l. Used chlorofluorocarbon refrigerants from totally enclosed heat transfer equipment, including mobile air-conditioning systems, mobile refrigeration, and commercial and industrial air-conditioning and refrigeration systems that use chlorofluorocarbons as the heat transfer fluid in a refrigeration cycle, provided the refrigerant is reclaimed for further use.

m. Nonterne plated used oil filters that are not mixed with waste listed in sections 33-24-02-15 through 33-24-02-19 if these oil filters have been gravity hot-drained using one of the following methods:

(1) Puncturing the filter antidrain back valve or the filter dome end and hot-draining;

(2) Hot-draining and crushing;

(3) Dismantling and hot-draining; or

(4) Any other equivalent hot-draining method that will remove used oil.

n. Used oil re-refining distillation bottoms that are used as feedstock to manufacture asphalt products.

o. Leachate or gas condensate collected from landfills where certain solid wastes have been disposed, provided that:

(1) The solid wastes disposed would meet one or more of the listing descriptions for hazardous wastes codes K169, K170, K171, K172, K174, K175, K176, K177, and K178, if these wastes had been generated after the effective date of the listing;

(2) The solid wastes described in paragraph 1 were disposed prior to the effective date of the listing;

(3) The leachate or gas condensate do not exhibit any characteristic of hazardous waste nor are derived from any other listed hazardous waste;

(4) Discharge of the leachate or gas condensate, including leachate or gas condensate transferred from the landfill to a publicly owned treatment works by truck, rail, or dedicated pipe, is subject to regulation under sections 307(b) or 402 of the Clean Water Act; and

(5) As of February 13, 2001, leachate or gas condensate derived from K169 through K172 is no longer exempt if it is stored or managed in a surface impoundment prior to discharge. After November 21, 2003, leachate or gas condensate derived from K176, K177, and K178 will no longer be exempt if it is stored or managed in a surface impoundment prior to discharge. There is one exception: if the surface impoundment is used to temporarily store leachate or gas condensate in response to an emergency situation (for example, shutdown of wastewater treatment system), provided the impoundment has a double liner, and provided the leachate or gas condensate is removed from the impoundment and continues to be managed in compliance with the conditions of this subdivision after the emergency ends.

3. **Hazardous wastes that are exempted from certain regulations.** A hazardous waste which is generated in a product or raw material storage tank, a product or raw material transport vehicle or vessel, a product or raw material pipeline, or in a manufacturing process unit or an associated non-waste-treatment-manufacturing unit is not subject to regulation under chapters 33-24-03 through 33-24-07 or to the notification requirements until it exits the unit in which it was generated, unless the unit is a surface impoundment, or unless the hazardous waste remains in the unit more than ninety days after the unit ceases to be operated for manufacturing, or for storage or transportation of product or raw materials.

4. **Samples.**

a. Except as provided in subdivision b, a sample of solid waste or a sample of water, soil, or air, which is collected for the sole purpose of testing to determine its characteristics or composition, is not subject to any requirements of this chapter or chapters 33-24-03 through 33-24-07 or to the notification requirements when:

(1) The sample is being transported to a laboratory for the purpose of testing;

(2) The sample is being transported back to the sample collector after testing;

(3) The sample is being stored by the sample collector before transport to a laboratory for testing;

(4) The sample is being stored in a laboratory before testing;

(5) The sample is being stored in a laboratory after testing but before it is returned to the sample collector; or

(6) The sample is being stored temporarily in the laboratory after testing for a specific purpose, e.g., until conclusion of a court case or enforcement action if further testing of the sample may be necessary.

b. In order to qualify for the exemption in paragraphs 1 and 2 of subdivision a, a sample collector shipping samples to a laboratory and a laboratory returning samples to a sample collector must:

(1) Comply with the United States department of transportation, the United States postal service, or any other applicable shipping requirement; or

(2) Comply with the following requirements if the sample collector determines that the United States department of transportation, the United States postal service, or other shipping requirements do not apply to the shipment of the sample:

(a) Assure that the following information accompanies the sample:

[1] The sample collector's name, mailing address, and telephone number;

[2] The laboratory's name, mailing address, and telephone number;

[3] The quantity of the sample;

[4] The date of shipment; and

[5] A description of the sample.

(b) Package the sample so that it does not leak, spill, or vaporize from its packaging.

c. This exemption does not apply if the laboratory determines that the waste is hazardous but the laboratory is no longer meeting any of the conditions stated in subdivision a.

5. **Treatability study samples.**

a. Except as provided in subdivision b, persons who generate or collect samples for the purpose of conducting treatability studies as defined in section 33-24-01-04 are not subject to any requirement of chapters 33-24-02 through 33-24-04 or to the notification requirements, nor are such samples included in the quantity determination of section 33-24-02-05 and subsection 4 of section 33-24-03-12 when:

(1) The sample is being collected and prepared for transportation by the generator or sample collectors;

(2) The sample is being accumulated or stored by the generator or sample collector prior to transportation to a laboratory or testing facility; or

(3) The sample is being transported to the laboratory or testing facility for the purpose of conducting a treatability study.

b. The exemption in subdivision a is applicable to samples of hazardous waste being collected and shipped for the purpose of conducting treatability studies provided that:

(1) The generator or sample collector uses, in "treatability studies", no more than ten thousand kilograms of media contaminated with nonacute hazardous waste, one thousand kilograms of nonacute hazardous waste other than contaminated media, one kilogram of acute hazardous waste, twenty-five hundred kilograms of media contaminated with acute hazardous waste for each process being evaluated for each generated waste stream.

(2) The mass of each sample shipment does not exceed ten thousand kilograms; the ten thousand kilogram quantity may be all media contaminated with nonacute hazardous waste, or may include twenty-five hundred kilograms of media contaminated with acute hazardous waste, one thousand kilograms of hazardous waste, and one kilogram of acute hazardous waste.

(3) The sample must be packaged so that it will not leak, spill, or vaporize from its packaging during shipment and the requirements of subparagraph a or b are met.

(a) The transportation of each sample shipment complies with United States department of transportation, United States postal service, or any other applicable shipping requirements; or

(b) If the United States department of transportation, United States postal service, or other shipping requirements do not apply to the shipment of the sample, the following information must accompany the sample:

[1] The name, mailing address, and telephone number of the originator of the samples;

[2] The name, address, and telephone number of the facility that will perform the treatability study;

[3] The quantity of the sample;

[4] The date of shipment; and

[5] A description of the sample, including its hazardous waste number.

(4) The sample is shipped to a laboratory or testing facility which is exempt under subsection 6 of section 33-23-02-04 or has an appropriate hazardous waste permit or interim status.

(5) The generator or sample collector maintains the following records for a period ending three years after completion of the treatability study:

(a) Copies of the shipping document;

(b) A copy of the contract with the facility conducting the treatability study;

(c) Documentation showing:

[1] The amount of waste shipped under this exemption;

[2] The name, address, and identification number of the laboratory or testing facility that received the waste;

[3] The date the shipment was made; and

[4] Whether unused samples and residues were returned to the generator.

(6) The generator reports the information required under subparagraph c of paragraph 5 in its biennial report.

c. The department may grant requests, on a case-by-case basis, for up to an additional two years for treatability studies involving bioremediation. The department may grant requests on a case-by-case basis for quantity limits in excess of those specified in paragraphs 1 and 2 of subdivision b of subsection 5 and subdivision d of subsection 6, for up to an additional five thousand kilograms of media contaminated with nonacute hazardous waste, five hundred kilograms of nonacute hazardous waste, twenty-five hundred kilograms of media contaminated with acute hazardous waste, and one kilogram of acute hazardous waste:

(1) In response to requests for authorization to ship, store, and conduct treatability studies on additional quantities in advance of commencing treatability studies. Factors to be considered in reviewing such requests include the nature of the technology, the type of process, for example, batch versus continuous, size of the unit undergoing testing, particularly in relation to scale-up considerations, the time and quantity of material required to reach steady state operating conditions, or test design considerations such as mass balance calculations.

(2) In response to requests for authorization to ship, store, and conduct treatability studies on additional quantities after initiation or completion of initial treatability studies, when there has been an equipment or mechanical failure during the conduct of the treatability study; there is a need to verify the results of a previous study; there is a need to study and analyze alternative techniques within a previously evaluated process; or there is a need to do further evaluation of an ongoing treatability study to determine final specifications for treatment.

(3) The additional quantities and timeframes allowed in paragraphs 1 and 2 are subject to all the provisions in subdivision a and paragraphs 3 through 6 of subdivision b. The generator or sample collector must apply to the department and provide in writing the following information:

(a) The reason why the generator or sample collector requires additional time or quantity of sample for treatability study evaluation and the additional time or quantity needed;

(b) Documentation accounting for all samples of hazardous waste from the waste stream which have been sent for or undergone treatability studies, including the date each previous sample from the waste stream was shipped, the quantity of each previous shipment, the

laboratory or testing facility to which it was shipped, what treatability study processes were conducted on each sample shipped, and the available results on each treatability study;

(c) A description of the technical modifications or change in specifications which will be evaluated and the expected results;

(d) If such further study is being required due to equipment of mechanical failure, the applicant must include information regarding the reason for the failure or breakdown and also include what procedures or equipment improvements have been made to protect against further breakdowns; and

(e) Such other information that the department considers necessary.

6. **Samples undergoing treatability studies at laboratories and testing facilities.** Samples undergoing treatability studies and the laboratory or testing facility conducting such treatability studies, to the extent such facilities are not otherwise subject to hazardous waste requirements, are not subject to any requirements of this article, or to the notification requirements provided that the conditions of subdivisions a through k are met. A mobile treatment unit may qualify as a testing facility subject to subdivisions a through k. Where a group of mobile treatment units are located at the same site, the limitations specified in subdivisions a through k apply to the entire group of mobile treatment units collectively as if the group were one mobile treatment unit.

a. No less than forty-five days before conducting treatability studies, the facility notifies the department in writing that it intends to conduct treatability studies under this subsection.

b. The laboratory or testing facility conducting the treatability study has an identification number.

c. No more than a total of ten thousand kilograms of "as received" media contaminated with nonacute hazardous waste, twenty-five hundred kilograms of media contaminated with acute hazardous waste, or two hundred fifty kilograms of other "as received" hazardous waste is subject to initiation of treatment in all treatability studies in any single day. "As received" wastes refers to the waste as received in the shipment from the generator or sample collector.

d. The quantity of "as received" hazardous waste stored at the facility for the purpose of evaluation in treatability studies does not exceed ten thousand kilograms, the total of which can include ten thousand kilograms of media contaminated with nonacute hazardous waste, twenty-five hundred kilograms of media contaminated with acute hazardous waste, one thousand kilograms of nonacute hazardous waste other than contaminated media, and one kilogram of acute hazardous waste. This quantity limitation does not include treatment materials, including nonhazardous solid waste, added to "as received" hazardous waste.

e. No more than ninety days have elapsed since the treatability study for the sample was completed, or no more than one year, two years for treatability studies involving bioremediation, have elapsed since the generator or sample collector shipped the sample to the laboratory or testing facility, whichever date occurs first. Up to five hundred kilograms of treated material from a particular waste stream from treatability studies may be archived for future evaluation up to five years from the date of initial receipt. Quantities of materials archived are counted against the total storage limit for the facility.

f. The treatability study does not involve the placement of hazardous waste on the land or open burning of hazardous waste.

g. The facility maintains records for three years following completion of each study that shows compliance with the treatment rate limits and the storage time and quantity limits. The following specific information must be included for each treatability study conducted:

(1) The name, address, and identification number of the generator or sample collector of each waste sampled;

(2) The date the shipment was received;

(3) The quantity of waste accepted;

(4) The quantity of "as received" waste in storage each day;

(5) The date the treatment study was initiated and the amount of "as received" waste introduced to treatment each day;

(6) The date the treatability study was concluded; and

(7) The date any unused sample or residues generated from the treatability study were returned to the generator or sample collector or, if sent to a designated facility, the name of the facility and the identification number.

h. The facility keeps, onsite, a copy of the treatability study contract and all shipping papers associated with the transport of treatability study samples to and from the facility for a period ending three years from the completion date of each treatability study.

i. The facility prepares and submits a report to the department by March fifteenth of each year that estimates the number of studies and the amount of waste expected to be used in treatability studies during the current year, and includes the following information for the previous calendar year:

(1) The name, address, and identification number of the facility conducting the treatability study;

(2) The types, by process, of treatability studies conducted;

(3) The names and addresses of persons for whom studies have been conducted, including their identification numbers;

(4) The total quantity of waste in storage each day;

(5) The quantity and type of waste subjected to treatability studies;

(6) When each treatability study was conducted; and

(7) The final disposition of residues and unused samples from each treatability study.

j. The facility determines whether any unused sample or residues generated by the treatability study are hazardous waste under section 33-24-02-03 and, if so, are subject to chapters 33-24-02 through 33-24-06, unless the residues and unused samples are returned to the sample originator under the subsection 5 of section 33-24-02-04 exemption.

k. The facility notifies the department by letter when the facility is no longer planning to conduct any treatability studies at the site.

7. **Polychlorinated biphenyl wastes regulated under Toxic Substance Control Act.** The disposal of polychlorinated biphenyl-containing dielectric fluid and electric equipment containing such fluid authorized for use and regulated under 40 CFR 761 and that are hazardous only because they fail the test for the toxicity characteristic (hazardous waste codes D018 through D043 only) are exempt from regulation under this article, and the notification requirements.

8. **Dredged material that is not a hazardous waste.** Dredged material that is subject to the requirements of a permit that has been issued

under section 404 of the Federal Water Pollution Control Act [33 U.S.C.1344] or section 103 of the Marine Protection, Research, and Sanctuaries Act of 1972 [33 U.S.C. 1413] is not a hazardous waste. For this subsection, the following definitions apply:

a. The term dredged material has the same meaning as defined in 40 CFR 232.2.

b. The term permit means:

(1) A permit issued by the United States army corps of engineers (corps) or an approved state under section 404 of the Federal Water Pollution Control Act [33 U.S.C. 1344];

(2) A permit issued by the corps under section 103 of the Marine Protection, Research, and Sanctuaries Act of 1972 [33 U.S.C. 1413]; or

(3) In the case of corps civil work projects, the administrative equivalent of the permits referred to in paragraphs 1 and 2, as provided for in corps regulations (for example, see 33 CFR 336.1, 336.2, and 337.6).

History: Effective January 1, 1984; amended effective October 1, 1986; December 1, 1988; December 1, 1991; January 1, 1994; July 1, 1997; December 1, 2003.
General Authority: NDCC 23-20.3-03
Law Implemented: NDCC 23-20.3-03, 23-20.3-04, 23-20.3-10

33-24-02-05. Special requirements for hazardous waste generated by conditionally exempt small quantity generators.

1. A generator is a conditionally exempt small quantity generator in a calendar month if the generator generates no more than one hundred kilograms of hazardous waste in that month.

2. Except for those wastes identified in subsections 5, 6, 7, and 10, a conditionally exempt small quantity generator's hazardous wastes are not subject to regulation under chapters 33-24-03 through 33-24-07, and the notification requirements, provided the generator complies with the requirements of subsections 6, 7, and 10.

3. When making the quantity determinations, the generator must include all hazardous waste that it generates, except hazardous waste that:

a. Is exempt from regulation under subsections 3 through 7 of section 33-24-02-04, subdivision c of subsection 1 of section 33-24-02-06, or subsection 1 of section 33-24-02-07;

b. Is managed immediately upon generation only in onsite elementary neutralization units, wastewater treatment units, or totally enclosed treatment facilities as defined in section 33-24-01-04;

c. Is recycled, without prior storage or accumulation, only in an onsite process subject to regulation under subdivision b of subsection 3 of section 33-24-02-06;

d. Is used oil managed under the requirements of subdivision d of subsection 1 of section 33-24-02-06 and sections 33-24-05-600 through 33-24-05-689;

e. Is spent lead-acid batteries managed under sections 33-24-05-235 through 33-24-05-249; or

f. Is universal waste managed under subsection 5 of section 33-24-02-06 and sections 33-24-05-701 through 33-24-05-765.

4. In determining the quantity of hazardous waste generated, a generator need not include:

a. Hazardous waste when it is removed from onsite storage;

b. Hazardous waste produced by onsite treatment, including reclamation, of their hazardous waste, so long as the hazardous waste that is treated was counted once; or

c. Spent materials that are generated, reclaimed, and subsequently reused onsite, so long as such spent materials have been counted once.

5. If a generator generates acute hazardous waste in a calendar month in quantities greater than set forth below, all quantities of that acute hazardous waste are subject to full regulation under chapters 33-24-03 through 33-24-07, and the notification requirements.

a. A total of one kilogram of acute hazardous waste listed in section 33-24-02-16, 33-24-02-17, or subsection 5 of section 33-24-02-18.

b. A total of one hundred kilograms of any residue or contaminated soil, waste, or other debris resulting from the cleanup of a spill, into or on any land or water, of any acute hazardous waste listed in sections 33-24-02-16, 33-24-02-17, or subsection 5 of section 33-24-02-18. [Comment: "Full regulation" means those regulations applicable to generators of greater than one thousand kilograms of nonacutely hazardous waste in a calendar month.]

6. In order for acute hazardous wastes generated by a generator of acute hazardous wastes in quantities equal to or less than set forth in subdivision a or b of subsection 5 to be excluded from full regulation under this section, the generator shall comply with the following requirements:

   a. Section 33-24-03-02;

   b. The generator may accumulate acute hazardous waste onsite. If the generator accumulates at any time acute hazardous waste in quantities greater than those set forth in subdivision a or b of subsection 5, all of those accumulated wastes are subject to regulation under section 33-24-03-07 and the applicable notification requirements. The time period of subsection 1 of section 33-24-03-12, for accumulation of wastes onsite, begins when the accumulated wastes exceed the applicable exclusion limit;

   c. A conditionally exempt small quantity generator may either treat or dispose of the generator's acute hazardous waste in an onsite facility or ensure delivery to an offsite storage, treatment, or disposal facility, either of which, if located in the United States, is:

      (1) Permitted under chapter 33-24-06;

      (2) In interim status under subsection 2 of section 33-20.3-05 of North Dakota Century Code chapter 33-20.3;

      (3) Authorized to manage hazardous waste by a state;

      (4) Permitted, licensed, or registered by a state to manage municipal solid waste, and if managed in a municipal solid waste landfill subject to article 33-20 or other regulation equivalent to 40 CFR part 258;

      (5) Permitted, licensed, or registered by a state to manage nonmunicipal nonhazardous waste and, if managed in a nonmunicipal nonhazardous waste landfill after January 1, 1998, is subject to article 33-20 or other regulation equivalent to sections 5 through 30 of 40 CFR part 257;

      (6) A facility which:

         (a) Beneficially uses or reuses, or legitimately recycles or reclaims its waste; or

         (b) Treats its waste prior to beneficial use or reuse, or legitimate recycling or reclamation; or

(7) For universal waste managed under sections 33-24-05-700 through 33-24-05-799, a universal waste handler or destination facility subject to the requirements of sections 33-24-05-700 through 33-24-05-799.

[NOTE: Although provisions of this subsection exclude certain generators from full regulation under this section, all applicable provisions of article 33-20, North Dakota solid waste management rules apply.]

7. In order for hazardous waste generated by a conditionally exempt small quantity generator in quantities of less than one hundred kilograms of hazardous waste during a calendar month to be excluded from full regulation under this section, the generator shall comply with the following requirements:

a. Section 33-24-03-02.

b. The conditionally exempt small quantity generator may accumulate hazardous waste onsite. If the generator accumulates at any time more than a total of one thousand kilograms of the generator's hazardous waste, all of those accumulated wastes are subject to regulation under special provisions of chapter 33-24-03 applicable to generators of between one hundred kilograms and one thousand kilograms of hazardous waste in a calendar month as well as the requirements of chapters 33-24-04 through 33-24-06 and the applicable notification requirements. The time period of subsection 4 of section 33-24-03-12 for accumulation of wastes onsite begins for a conditionally exempt small quantity generator when the accumulated wastes exceed one thousand kilograms;

c. A conditionally exempt small quantity generator may either treat or dispose of the generator's hazardous waste in an onsite facility, or ensure delivery to an offsite storage, treatment, or disposal facility, either of which, if located in the United States, is:

(1) Permitted under chapter 33-24-06;

(2) In interim status under subsection 2 of section 23-20.3-05 of North Dakota Century Code chapter 23-20.3;

(3) Authorized to manage hazardous waste by a state;

(4) Permitted, licensed, or registered by a state to manage municipal solid waste and, if managed in a municipal solid waste landfill subject to article 33-20 or other regulation equivalent to 40 CFR part 258;

(5) Permitted, licensed, or registered by a state to manage nonmunicipal nonhazardous waste and, if managed in a nonmunicipal nonhazardous waste disposal unit after January 1, 1998, is subject to article 33-20 or other regulation equivalent to sections 5 through 30 of 40 CFR part 257; or

(6) A facility which:

(a) Beneficially uses or reuses, or legitimately recycles or reclaims its waste; or

(b) Treats its waste prior to beneficial use or reuse, or legitimate recycling or reclamation; or

(7) For universal waste managed under sections 33-24-05-700 through 33-24-05-799, a universal waste handler or destination facility subject to the requirements of sections 33-24-05-700 through 33-24-05-799.

[NOTE: Although provisions of this subsection exclude certain generators from full regulation under this section, all applicable provisions of article 33-20, North Dakota solid waste management rules apply.]

8. Hazardous waste subject to the reduced requirements of this section may be mixed with nonhazardous waste and remain subject to these reduced requirements even though the resultant mixture exceeds the quantity limitations identified in this section, unless the mixture meets any of the characteristics of hazardous waste identified in sections 33-24-02-10 through 33-24-02-14.

9. If any person mixes a solid waste with a hazardous waste that exceeds the quantity exclusion level of this section, the mixture is subject to full regulation.

10. If a conditionally exempt small quantity generator's wastes are mixed with used oil, the mixture is subject to sections 33-24-05-600 through 33-24-05-689. Any material produced from such a mixture by processing, blending, or other treatment is also so regulated.

History: Effective January 1, 1984; amended effective October 1, 1986; December 1, 1988; December 1, 1991; January 1, 1994; July 1, 1997; December 1, 2003.
General Authority: NDCC 23-20.3-03
Law Implemented: NDCC 23-20.3-03, 23-20.3-04

33-24-02-06. Requirements for recyclable materials and universal waste.

1. The following requirements for recyclable materials are:

   a. Hazardous wastes that are recycled are subject to the requirements for generators, transporters, and storage facilities of subsections 2 and 3, except for the materials listed in subdivisions b and c of subsection 1. Hazardous wastes that are recycled will be known as "recyclable materials".

   b. The following recyclable materials are not subject to the requirements of this section but are regulated under sections 33-24-05-201 through 33-24-05-209, 33-24-05-230 through 33-24-05-249, 33-24-05-525 through 33-24-05-549, 33-24-05-600 through 33-24-05-689 and all applicable provisions in chapters 33-24-06 and 33-24-07:

      (1) Recyclable materials used in a manner constituting disposal (sections 33-24-05-201 through 33-24-05-204).

      (2) Hazardous wastes burned for energy recovery in boilers and industrial furnaces that are not regulated under sections 33-24-05-144 through 33-24-05-151 (sections 33-24-05-525 through 33-24-05-537).

      (3) Recyclable materials from which precious metals are reclaimed (section 33-24-05-230).

      (4) Spent lead-acid batteries that are being reclaimed (section 33-24-05-235).

   c. The following recyclable materials are not subject to regulation under chapters 33-24-03 through 33-24-07 and are not subject to notification requirements:

      (1) Industrial ethyl alcohol that is reclaimed except that, unless provided otherwise in an international agreement as specified in section 33-24-03-25:

         (a) A person initiating a shipment for reclamation in a foreign country, and any intermediary arranging for the shipment, must comply with the requirements applicable to a primary exporter in section 33-24-03-20, subdivisions a through d and f of subsection 1 and subsection 2 of section 33-24-03-23, and section 33-24-03-24, export such materials only upon consent of the receiving country and in conformance with the environmental protection agency acknowledgment of

consent as defined in sections 33-24-03-50 through 33-24-03-59, and provide a copy of the environmental protection agency acknowledgment of consent to the shipment to the transporter transporting the shipment for export.

(b) Transporters transporting a shipment for export may not accept a shipment if the transporter knows the shipment does not conform to the environmental protection agency acknowledgment of consent, shall ensure that a copy of the environmental protection agency acknowledgment of consent accompanies the shipment, and shall ensure that it is delivered to the facility designated by the person initiating the shipment.

(2) Scrap metal that is not excluded under subdivision m of subsection 1 of section 33-24-02-04.

(3) Fuels produced from the refining of oil-bearing hazardous wastes along with normal process streams at a petroleum refining facility, if such wastes result from normal petroleum refining, production, and transportation practices (this exemption does not apply to fuels produced from oil recovered from oil-bearing hazardous waste, when such recovered oil is already excluded under subdivision l of subsection 1 of section 33-24-02-04).

(4) Subdivision c also applies to the following:

(a) Hazardous waste fuel produced from oil-bearing hazardous wastes from petroleum refining, production, or transportation practices, or produced from oil reclaimed from such hazardous wastes, when such hazardous wastes are reintroduced into a process that does not use distillation or does not produce products from crude oil so long as the resulting fuel meets the used oil specification under section 33-24-05-611 and so long as no other hazardous wastes are used to produce the hazardous waste fuel;

(b) Hazardous waste fuel produced from oil-bearing hazardous waste from petroleum refining, production, and transportation practices, when such hazardous wastes are reintroduced into a refining process after a point in which contaminates are removed, so long as the fuel meets the used oil fuel specification under section 33-24-05-611; and

(c) Oil reclaimed from oil-bearing hazardous wastes from petroleum refining, production, and transportation practices, which reclaimed oil is burned as a fuel without reintroduction to a refining process, so long as the reclaimed oil meets the used oil fuel specification under section 33-24-05-611.

d. Used oil that is recycled and is also a hazardous waste solely because it exhibits a hazardous characteristic is not subject to the requirements of chapters 33-24-01 through 33-24-04, and sections 33-24-05-01 through 33-24-05-190, sections 33-24-05-250 through 33-24-05-524, and sections 33-24-05-550 through 33-24-05-559, but is regulated under sections 33-24-05-600 through 33-24-05-689. Used oil that is recycled includes any used oil which is reused, following its original use, for any purpose (including the purpose for which the oil was originally used). Such term includes oil which is re-refined, reclaimed, burned for energy recovery, or reprocessed.

2. Generators and transporters of recyclable materials are subject to the applicable requirements of chapters 33-24-03 and 33-24-04 and the notification requirements, except as provided in subsection 1.

3. Owners or operators of facilities that:

a. Store recyclable materials before they are recycled are regulated under all applicable provisions of sections 33-24-05-01 through 33-24-05-143, sections 33-24-05-400 through 33-24-05-474, sections 33-24-05-191 through 33-24-05-299, and chapters 33-24-06 and 33-24-07 and the notification requirements, under section 3010 of the Resource Conservation and Recovery Act, except as provided in subsection 1. The recycling process itself is exempt from regulation except as provided in subsection 4 of section 33-24-02-06.

b. Recycle recyclable materials without storing them before they are recycled are subject to the following requirements, except as provided in subsection 1:

(1) Notification requirements;

(2) Sections 33-24-05-38 and 33-24-05-39 (dealing with the use of the manifest and manifest discrepancies); and

(3) Subsection 4 of section 33-24-02-06.

4. Owners or operators of facilities subject to the hazardous waste permitting requirements with hazardous waste management units that

recycle hazardous wastes are subject to the requirements of sections 33-24-05-400 through 33-24-05-449.

5. The wastes listed in this subsection are exempt from regulation under chapters 33-24-03 through 33-24-06 except as specified in sections 33-24-05-701 through 33-24-05-799 and, therefore are not fully regulated as hazardous waste. The wastes listed in this subsection are subject to regulation under sections 33-24-05-701 through 33-24-05-799:

   a. Batteries as described in section 33-24-05-702;

   b. Pesticides as described in section 33-24-05-703;

   c. Mercury-containing devices as described in section 33-24-05-704; and

   d. Lamps as described in 33-24-05-705.

History: Effective January 1, 1984; amended effective October 1, 1986; December 1, 1988; December 1, 1991; January 1, 1994; July 1, 1997; December 1, 2003.
General Authority: NDCC 23-20.3-03
Law Implemented: NDCC 23-20.3-03, 23-20.3-04

33-24-02-07. Residues of hazardous wastes in empty containers.

1. Unless empty as defined in subsection 2, 3, or 4, any hazardous waste in either a container or an inner liner removed from a container is subject to regulation under chapters 33-24-02 through 33-24-07 and to the notification requirements.

2. A container or an inner liner removed from a container that has held any hazardous waste, except a waste that is a compressed gas or that is identified as an acute hazardous waste listed in section 33-24-02-16, section 33-24-02-17, or subsection 5 of section 33-24-02-18, is empty if:

   a. All wastes have been removed that can be removed using the practices commonly employed to remove materials from that type of container, for example, pouring, pumping, and aspirating; and

   b. One of the following:

      (1) No more than two and one-half centimeters [1 inch] of residue remain on the bottom of the container or inner liner;

      (2) No more than three percent by weight of the total capacity of the container remains in the container or inner liner if the

container is less than or equal to one hundred ten gallons [416.40 liters] in size; or

(3) No more than three-tenths of one percent by weight of the total capacity of the container remains in the container or inner liner if the container is greater than one hundred ten gallons [416.40 liters] in size.

3. A container that has held a hazardous waste that is a compressed gas is empty when the pressure in the container approaches atmospheric levels.

4. A container or an inner liner removed from a container that has held a hazardous waste listed in section 33-24-02-16, section 33-24-02-17, or subsection 5 of section 33-24-02-18 is empty if:

a. The container or inner liner has been triple-rinsed using a solvent capable of removing the commercial chemical product or manufacturing chemical intermediate;

b. The container or inner liner has been cleaned by another method that has been shown in the scientific literature or by tests conducted by the generator, to achieve equivalent removal; or

c. In the case of a container, the inner liner that prevented contact of the commercial chemical product or manufacturing chemical intermediate with the container has been removed.

History: Effective January 1, 1984; amended effective October 1, 1986; July 1, 1997; December 1, 2003.
General Authority: NDCC 23-20.3-03
Law Implemented: NDCC 23-20.3-03, 23-20.3-04

33-24-02-08. Criteria for identifying the characteristics of hazardous waste. The department shall identify and define a characteristic of hazardous waste in this chapter only upon determining that:

1. A solid waste that exhibits the characteristic may:

a. Cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or

b. Pose a substantial present or potential hazard to human health or the environment when it is improperly treated, stored, transported, disposed of, or otherwise managed; and

2. The characteristic can be:

a. Measured by an available standardized test method which is reasonably within the capability of generators of solid waste or private sector laboratories that are available to serve generators of solid waste; or

b. Reasonably detected by generators of solid waste through their knowledge of their waste.

History: Effective January 1, 1984.
General Authority: NDCC 23-20.3-03
Law Implemented: NDCC 23-20.3-04

33-24-02-09. Criteria for listing hazardous waste.

1. The department shall list a solid waste as a hazardous waste only upon determining that the solid waste meets one of the following criteria:

   a. It exhibits any of the characteristics of hazardous waste identified in this chapter.

   b. It has been found to be fatal to humans in low doses or, in the absence of data on human toxicity, it has been shown in studies to have an oral LD 50 toxicity (rat) of less than fifty milligrams per kilogram, and inhalation LC 50 toxicity (rat) of less than two milligrams per liter, or a dermal LD 50 toxicity (rabbit) of less than two hundred milligrams per kilogram or is otherwise capable of causing or significantly contributing to an increase in serious irreversible, or incapacitating reversible, illness. (Waste listed in accordance with these criteria will be designated acute hazardous waste.)

   c. It contains any of the toxic constituents listed in appendix V and, after considering the following factors, the department concludes that the waste is not capable of posing a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of or otherwise managed:

      (1) The nature of the toxicity presented by the constituent;

      (2) The concentration of the constituent in the waste;

      (3) The potential of the constituent or any toxic degradation product of the constituent to migrate from the waste into the environment under the types of improper management considered in paragraph 7;

      (4) The persistence of the constituent or any toxic degradation product of the constituent;

(5) The potential for the constituent or any toxic degradation product of the constituent to degrade into nonharmful constituents and the rate of degradation;

(6) The degree to which the constituent or any degradation product of the constituent bioaccumulates in ecosystems;

(7) The plausible types of improper management to which the waste could be subjected;

(8) The quantities of the waste generated at individual generation sites or on a statewide basis;

(9) The nature and severity of the human health and environmental damage that has occurred as a result of the improper management of wastes containing the constituent;

(10) Action taken by other governmental agencies or regulatory programs based on the health or environmental hazard posed by the waste or waste constituent; and

(11) Such other factors as may be appropriate.

Substances will be listed on appendix V only if they have been shown in scientific studies to have toxic, carcinogenic, mutagenic or teratogenic effects on human or other life forms. (Wastes listed in accordance with these criteria will be designated toxic wastes.)

2. The department may list classes or types of solid waste as hazardous wastes if it has reason to believe that individual wastes, within the class or type of waste, typically or frequently are hazardous under the definition of hazardous waste found in subsection 5 of North Dakota Century Code section 23-20.3-02.

3. The department will use the criteria for listing specified in this section to establish the exclusion limits referred to in subsection 3 of section 33-24-02-05.

History: Effective January 1, 1984; amended effective December 1, 1988; December 1, 1991.
General Authority: NDCC 23-20.3-03
Law Implemented: NDCC 23-20.3-03, 23-20.3-04

33-24-02-10. General characteristics of hazardous waste.

1. A solid waste, as defined in section 33-24-02-02, which is not excluded from regulation as a hazardous waste under subsection 2 of section 33-24-02-04 is a hazardous waste if it exhibits any of the characteristics identified in this chapter. (Comment: Section 33-24-03-02 sets forth the

generator's responsibility to determine whether the generator's waste exhibits one or more of the characteristics identified in this chapter.)

2. A hazardous waste which is identified by a characteristic in sections 33-24-02-10 through 33-24-02-14 is assigned every hazardous waste number that is applicable as set forth in this chapter. This number must be used in complying with the notification requirements and all applicable recordkeeping and reporting requirements under chapters 33-24-03 through 33-24-06.

3. For purposes of sections 33-24-02-10 through 33-24-02-14, the department will consider a sample obtained using any of the applicable sampling methods specified in appendix I to be a representative sample within the meaning of chapter 33-24-01.

History: Effective January 1, 1984; amended effective December 1, 1991.
General Authority: NDCC 23-20.3-03
Law Implemented: NDCC 23-20.3-03, 23-20.3-04

33-24-02-11. Characteristic of ignitability.

1. A solid waste exhibits the characteristic of ignitability if a representative sample of the waste has any of the following properties:

   a. It is a liquid, other than an aqueous solution containing less than twenty-four percent alcohol by volume, and has a flashpoint less than sixty degrees Celsius [140 degrees Fahrenheit], as determined by a Penske-Martins closed cup tester, using the test method specified in American Society for Testing and Material Standard D-93-79 or D-93-80, or a setaflash closed cup tester, using the test method specified in American Society for Testing and Material Standard D-3278-78, or a miniflash continuously closed cup tester, using the test method specified in American Society for Testing and Material D-6450-99 (incorporated by reference in section 33-24-01-05), or as determined by an equivalent test method approved by the department under procedures set forth in sections 33-24-01-06 and 33-24-01-07.

   b. It is not a liquid and is capable, under standard temperature and pressure of causing fire through friction, absorption of moisture or spontaneous chemical changes and, when ignited, burns so vigorously that it creates a hazard.

   c. It is an ignitable compressed gas as defined in 49 CFR 173.300 and as determined by the test methods described in that regulation or equivalent test methods approved by the department.

   d. It is an oxidizer as defined in 49 CFR 173.151.

2. A solid waste that exhibits the characteristic of ignitability has the hazardous waste number of D001.

History: Effective January 1, 1984; amended effective December 1, 1991; December 1, 2003.
General Authority: NDCC 23-20.3-03
Law Implemented: NDCC 23-20.3-03, 23-20.3-04

33-24-02-12. Characteristic of corrosivity.

1. A solid waste exhibits the characteristic of corrosivity if a representative sample of the waste has either of the following properties:

   a. It is aqueous and has a pH less than or equal to two or greater than or equal to twelve and five-tenths, as determined by a pH meter, using method 9040 in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", environmental protection agency publication SW-846, as incorporated by reference in section 33-24-01-05, or an equivalent test method approved by the department; or

   b. It is a liquid and corrodes steel (SAE 1020) at a rate greater than six and thirty-five-hundredths millimeters [0.250 inch] per year at a test temperature of fifty-five degrees Celsius [130 degrees Fahrenheit] as determined by the test method specified in National Association of Corrosion Engineers (NACE) Standard TM-01-69 as standardized in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", environmental protection agency publication SW-846, as incorporated by reference in section 33-24-01-05, or an equivalent test method approved by the department.

2. A solid waste that exhibits the characteristic of corrosivity has the hazardous waste number of D002.

History: Effective January 1, 1984; amended effective December 1, 1988; December 1, 1991; July 1, 1997.
General Authority: NDCC 23-20.3-03
Law Implemented: NDCC 23-20.3-03, 23-20.3-04

33-24-02-13. Characteristic of reactivity.

1. A solid waste exhibits the characteristic of reactivity if a representative sample of the waste has any of the following properties:

   a. It is normally unstable and readily undergoes violent change without detonating.

   b. It reacts violently with water.

c. It forms potentially explosive mixtures with water.

d. When mixed with water, it generates toxic gases, vapors, or fumes in a quantity sufficient to present a danger to human health or the environment.

e. It is a cyanide-bearing or sulfide-bearing waste which, when exposed to pH conditions between two and twelve and five-tenths, can generate toxic gases, vapors, or fumes in a quantity sufficient to present a danger to human health or the environment.

f. It is capable of detonation or explosive reaction if it is subjected to a strong initiating source or if heated under confinement.

g. It is readily capable of detonation or explosive decomposition or reaction at standard temperature and pressure.

h. It is a forbidden explosive as defined in 49 CFR 173.51, or a Class A explosive as defined in 49 CFR 173.53 or a Class B explosive as defined in 49 CFR 173.88.

2. A solid waste that exhibits the characteristic of reactivity has the hazardous waste number of D003.

History: Effective January 1, 1984; amended effective December 1, 1991.
General Authority: NDCC 23-20.3-03
Law Implemented: NDCC 23-20.3-03, 23-20.3-04

33-24-02-14. Toxicity characteristic.

1. A solid waste (except manufactured gas plant waste) exhibits the characteristic of toxicity if, using the toxicity characteristic leaching procedure, test method 1311 in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", environmental protection agency publication SW-846, as incorporated by reference in section 33-24-01-05, the extract from a representative sample of the waste contains any of the contaminants listed in table 1 at the concentration equal to or greater than the respective value given in that table. If the waste contains less than one-half of one percent filterable solids, the waste itself, after filtering using the methodology outlined in method 1311, is considered to be the extract for the purposes of this section.

2. A solid waste that exhibits the characteristic of toxicity has the hazardous waste number specified in table 1 which corresponds to the toxic contaminant causing it to be hazardous.

Table 1. Maximum Concentration of Contaminants for the Toxicity Characteristic			
EPA HW No.[1]	Contaminant	CAS No.[2]	Regulatory Level (mg/l)
D004	Arsenic	7440-38-2	5.0
D005	Barium	7440-39-3	100.0
D018	Benzene	71-43-2	0.5
D006	Cadmium	7440-43-9	1.0
D019	Carbon tetrachloride	56-23-5	0.5
D020	Chlordane	57-74-9	0.03
D021	Chlorobenzene	108-90-7	100.0
D022	Chloroform	67-66-3	6.0
D007	Chromium	7440-47-3	5.0
D023	o-Cresol	95-48-7	[4]200.0
D024	m-Cresol	108-39-4	[4]200.0
D025	p-Cresol	106-44-5	[4]200.0
D026	Cresol	.....	[4]200.0
D016	2,4-D	94-75-7	10.0
D027	1,4-Dichlorobenzene	106-46-7	7.5
D028	1,2-Dichloroethane	107-06-2	0.5
D029	1,1-Dichloroethylene	75-35-4	0.7
D030	2,4-Dinitrotoluene	121-14-2	[3]0.13
D012	Endrin	72-20-8	0.02
D031	Heptachlor (and its epoxide)	76-44-8	0.008
D032	Hexachlorobenzene	118-74-1	[3]0.13
D033	Hexachlorobutadiene	87-68-3	0.5
D034	Hexachloroethane	67-72-1	3.0
D008	Lead	7439-92-1	5.0
D013	Lindane	58-89-9	0.4
D009	Mercury	7439-97-6	0.2
D014	Methoxychlor	72-43-5	10.0
D035	Methyl ethyl ketone	78-93-3	200.0
D036	Nitrobenzene	98-95-3	2.0
D037	Pentachlorophenol	87-86-5	100.0
D038	Pyridine	110-86-1	[3]5.0

D010	Selenium	7782-49-2	1.0
D011	Silver	7440-22-4	5.0
D039	Tetrachloroethylene	127-18-4	0.7
D015	Toxaphene	8001-35-2	0.5
D040	Trichloroethylene	79-01-6	0.5
D041	2,4,5-Trichlorophenol	95-95-4	400.0
D042	2,4,6-Trichlorophenol	88-06-2	2.0
D017	2,4,5-TP (Silvex)	93-72-1	1.0
D043	Vinyl chloride	75-01-4	0.2

[1]Hazardous waste number.

[2]Chemical abstracts service number.

[3]Quantitation limit is greater than the calculated regulatory level. The quantitation limit therefore becomes the regulatory level.

[4]If o-, m-, and p-Cresol concentrations cannot be differentiated, the total cresol (D026) concentration is used. The regulatory level of total cresol is 200 mg/l.

History: Effective January 1, 1984; amended effective October 1, 1986; December 1, 1991; January 1, 1994; July 1, 1997; December 1, 2003.
General Authority: NDCC 23-20.3-03
Law Implemented: NDCC 23-20.3-03, 23-20.3-04

33-24-02-15. Lists of hazardous wastes.

1. A solid waste is a hazardous waste if it is listed in sections 33-24-02-15 through 33-24-02-18, unless it has been excluded from these lists under section 33-24-01-06 or 33-24-01-08.

2. The department will indicate its basis for listing the classes or types of wastes listed in this chapter by employing one or more of the following hazard codes:

Waste Type	Waste Hazard Code
Ignitable Waste	(I)
Corrosive Waste	(C)
Reactive Waste	(R)
Toxicity Characteristic Waste	(E)
Acute Hazardous Waste	(H)
Toxic Waste	(T)

Appendix IV identifies the constituent which caused the waste to be listed as a toxicity characteristic waste (E) or toxic wastes (T) in sections 33-24-02-16 and 33-24-02-17.

3. Each hazardous waste listed in this chapter is assigned a hazardous waste number which precedes the name of the waste. The number must be used in complying with the notification requirements and certain recordkeeping and reporting requirements under chapters 33-24-03 through 33-24-06.

4. The following hazardous wastes listed in sections 33-24-02-16 and 33-24-02-17 are subject to the exclusion limits for acutely hazardous wastes established in section 33-24-02-05: hazardous waste numbers F020, F021, F023, F026, and F027.

History: Effective January 1, 1984; amended effective October 1, 1986; December 1, 1988; December 1, 1991.
General Authority: NDCC 23-20.3-03
Law Implemented: NDCC 23-20.3-03, 23-20.3-04

33-24-02-16. Hazardous waste from nonspecific sources.

1. The following solid wastes are listed hazardous wastes from nonspecific sources unless they are excluded under sections 33-24-01-06 and 33-24-01-08 and listed in appendix VI.

Hazardous Waste No.	Hazardous Waste	Hazard Code
Generic:		
F001	The following spent halogenated solvents used in degreasing: tetrachloroethylene, trichloroethylene, methylene chloride, 1,1,1-trichloroethane, carbon tetrachloride, and chlorinated fluorocarbons; all spent solvent mixtures/blends used in degreasing containing, before use, a total of ten percent or more (by volume) of one or more of the above halogenated solvents or those solvents listed in F002, F004, and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.	(T)

F002	The following spent halogenated solvents: tetrachloroethylene, methylene chloride, trichloroethylene, 1,1,1-trichloroethane, chlorobenzene, 1,1,2-trichloro-1,2,2-trifluoroethane, ortho-dichlorobenzene, trichlorofluoromethane, and 1,1,2-trichloroethane; all spent solvent mixtures/blends containing, before use, a total of ten percent or more (by volume) of one or more of the above halogenated solvents or those listed in F001, F004, or F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.	(T)
F003	The following spent nonhalogenated solvents: xylene, acetone, ethyl acetate, ethyl benzene, ethyl ether, methyl isobutyl ketone, n-butyl alcohol, cyclohexanone, and methanol; all spent solvent mixtures/blends containing, before use, only the above spent nonhalogenated solvents; and all spent solvent mixtures/blends containing, before use, one or more of the above nonhalogenated solvents, and, a total of ten percent or more (by volume) of one or more of those solvents listed in F001, F002, F004, and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.	(I)*
F004	The following spent nonhalogenated solvents: cresols and cresylic acid, and nitrobenzene; all spent solvent mixtures/blends containing, before use, a total of ten percent or more (by volume) of the above nonhalogenated solvents or those solvents listed in F001, F002, and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.	(T)
F005	The following spent nonhalogenated solvents: toluene, methyl ethyl ketone, carbon disulfide, isobutanol, pyridine, benzene, 2-ethoxyethanol, and 2-nitropropane; all spent solvent mixtures/blends containing, before use, a total of ten percent or more (by volume) of one or more of the above nonhalogenated solvents or those solvents listed in F001, F002, or F004; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.	(I, T)
F006	Wastewater treatment sludges from electroplating operations except from the following processes: (1) sulfuric acid anodizing of aluminum; (2) tin plating on carbon steel; (3) zinc plating (segregated basis) on carbon steel; (4) aluminum or zinc-aluminum plating on carbon steel; (5) cleaning/stripping associated with tin, zinc, and aluminum plating on carbon steel; and (6) chemical etching and milling of aluminum.	(T)

F007	Spent cyanide plating bath solutions from electroplating operations.	(R, T)
F008	Plating bath residues from the bottom of plating baths from electroplating operations where cyanides are used in the process.	(R, T)
F009	Spent stripping and cleaning bath solutions from electroplating operations where cyanides are used in the process.	(R, T)
F010	Quenching bath residue from oil baths from metal heat treating operations where cyanides are used in the process.	(R, T)
F011	Spent cyanide solutions from salt bath pot cleaning from metal heat treating operations.	(R, T)
F012	Quenching wastewater treatment sludges from metal heat treating operations where cyanides are used in the process.	(T)
F019	Wastewater treatment sludges from the chemical conversion coating of aluminum except from zirconium phosphating in aluminum can washing when such phosphating is an exclusive conversion coating process.	(T)
F020	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) or tri- or tetrachlorophenal, or of intermediates used to produce their pesticide derivatives. (This listing does not include wastes from the production of hexachlorophene from highly purified 2,4,5-trichlorophenol.)	(H)
F021	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of pentachlorophenol, or of intermediates used to produce its derivatives.	(H)
F022	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tetra-, penta-, or hexachlorobenzenes under alkaline conditions.	(H)

F023	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production of materials on equipment previously used for the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tri- and tetrachlorophenols. (This listing does not include wastes from equipment used only for the production or use of hexachlorophene from highly purified 2,4,5-trichlorophenol.)	(H)
F024	Process wastes, including but not limited to, distillation residues, heavy ends, tars, and reactor cleanout wastes, from the production of certain chlorinated aliphatic hydrocarbons by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five, with varying amounts and positions of chlorine substitution. (This listing does not include wastewaters, wastewater treatment sludges, spent catalysts, and wastes listed in section 33-24-02-16 or 33-24-02-17.	(T)
F025	Condensed light ends, spent filters and filter aids, and spent desiccant wastes from the production of certain chlorinated aliphatic hydrocarbons, by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five, with varying amounts and positions of chlorine substitution.	(T)
F026	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production of materials on equipment previously used for the manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tetra-, penta-, or hexachlorobenzene under alkaline conditions.	(H)
F027	Discarded unused formulations containing tri-, tetra-, or pentachlorophenol or discarded unused formulations containing compounds derived from these chlorophenols. (This listing does not include formulations containing hexachlorophene synthesized from prepurified 2,4,5-trichlorophenol as the sole component).	(H)
F028	Resides resulting from the incineration or thermal treatment of soil contaminated with environmental protection agency hazardous waste numbers F020, F021, F022, F023, F026, and F027.	(T)

*F032	Wastewaters (except those that have not come into contact with process contaminants), process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that currently use or have previously used chlorophenolic formulations (except potentially cross-contaminated wastes that have had the F032 waste code deleted in accordance with section 33-24-02-19 or potentially cross-contaminated wastes that are otherwise currently regulated as hazardous wastes, for example, F034 or F035, and where the generator does not resume or initiate use of chlorophenolic formulations). This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote or pentachlorophenol, or both.	(T)
*F034	Wastewaters (except those that have not come into contact with process contaminants), process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that use creosote formulations. This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote or pentachlorophenol, or both.	(T)
*F035	Wastewaters (except those that have not come into contact with process contaminants), process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that use inorganic preservatives containing arsenic or chromium. This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote or pentachlorophenol, or both.	(T)

F037	Petroleum refinery primary oil/water/solids separation sludge - Any sludge generated from the gravitational separation of oil/water/solids during the storage or treatment of process wastewaters and oil cooling wastewaters from petroleum refineries. Such sludges include those generated in oil/water/solids separators; tanks and impoundments; ditches and other conveyances; sumps; and stormwater units receiving dry weather flow, sludge generated in stormwater units that do not receive dry weather flow, sludges generated from noncontact once-through cooling waters segregated for treatment from other process or oily cooling waters, sludges generated in aggressive biological treatment units as defined in subdivision b of subsection 2 of section 33-24-02-16 (including sludges generated in one or more additional units after wastewaters have been treated in aggressive biological treatment units) and K051 wastes are not included in this listing. This listing does include residuals generated from processing or recycling oil-bearing hazardous secondary materials excluded under paragraph 1 of subdivision 1 of subsection 1 of section 33-02-04, if those residuals are to be disposed of.	(T)
F038	Petroleum refinery secondary (emulsified) oil/water/solids separation sludge - Any sludge and/or float generated from the physical and/or chemical separation of oil/water/solids in process wastewaters and oily cooling wastewaters from petroleum refineries. Such wastes include all sludges and floats generated in: induced air flotation (IAF) units, tanks and impoundments, and all sludges generated in dissolved air flotation (DAF) units. Sludges generated in stormwater units that do not receive dry weather flow, sludges generated from noncontact once-through cooling waters segregated for treatment from other process or oily cooling waters, sludges and floats generated in aggressive biological treatment units as defined in subdivision b of subsection 2 (including sludges and floats generated in one or more additional units after wastewaters have been treated in aggressive biological treatment units) and F037, K048, and K051 wastes are not included in this listing.	(T)
F039	Leachate (liquids that have percolated through land disposed wastes) resulting from the disposal of more than one restricted waste classified as hazardous under sections 33-24-02-15 through 33-24-02-19. (Leachate resulting from the disposal of one or more of the following hazardous wastes and no other hazardous wastes retains its hazardous waste numbers: F020, F021, F022, F026, F027, and/or F028.)	(T)

FOOTNOTE: *(I,T) should be used to specify mixtures containing ignitable and toxic constituents.

2. Listing specific definitions:

a. For the purposes of the F037 and F038 listings, oil/water/solids is defined as oil, water, or solids or any combination of them.

b. Aggressive biological treatment units are:

(1) For the purposes of the F037 and F038 listings, aggressive biological treatment units are defined as units which employ one of the following four treatment methods: activated sludge; trickling filter; rotating biological contactor for the continuous accelerated biological oxidation of wastewaters; or high-rate aeration. High-rate aeration is a system of surface impoundments or tanks, in which intense mechanical aeration is used to completely mix the wastes, enhance biological activity; and

(a) The unit employs a minimum of six horsepower per million gallons of treatment volume; and either

(b) The hydraulic retention time of the unit is no longer than five days; or

(c) The hydraulic retention time is no longer than thirty days and the unit does not generate a sludge that is a hazardous waste by the toxicity characteristic.

(2) Generators and treatment, storage, and disposal facilities have the burden of proving that their sludges are exempt from listing as F037 and F038 wastes under this definition. Generators and treatment, storage, and disposal facilities must maintain, in their operating or other onsite records, documents, and data sufficient to prove that:

(a) The unit is an aggressive biological treatment unit as defined in this subsection; and

(b) The sludges sought to be exempted from the definitions of F037 or F038, or both, were actually generated in the aggressive biological treatment unit.

c. Sludges are:

(1) For the purposes of the F037 listing, sludges are considered to be generated at the moment of deposition in the unit, where

deposition is defined as at least a temporary cessation of lateral particle movement.

(2) For the purposes of the F038 listing:

(a) Sludges are considered to be generated at the moment of deposition in the unit, where deposition is defined as at least a temporary cessation of lateral particle movement; and

(b) Floats are considered to be generated at the moment they are formed in the top of the unit.

History: Effective January 1, 1984; amended effective October 1, 1986; December 1, 1988; December 1, 1991; January 1, 1994; July 1, 1997; December 1, 2003.
General Authority: NDCC 23-20.3-03
Law Implemented: NDCC 23-20.3-03, 23-20.3-04

33-24-02-17. Hazardous waste from specific sources. The following solid wastes are listed hazardous wastes from specific sources unless they are excluded under sections 33-24-01-06 and 33-24-01-08 and listed in appendix VI.

Industry and Hazardous Waste No.	Hazardous Waste	Hazard Code
Wood Preservation:		
K001	Bottom sediment sludge from the treatment of wastewaters from wood preserving processes that use creosote and/or pentachlorophenol.	(T)
Inorganic Pigments:		
K002	Wastewater treatment sludge from the production of chrome yellow and orange pigments.	(T)
K003	Wastewater treatment sludge from the production of molybdate orange pigments.	(T)
K004	Wastewater treatment sludge from the production of zinc yellow pigments.	(T)
K005	Wastewater treatment sludge from the production of chrome green pigments.	(T)
K006	Wastewater treatment sludge from the production of chrome oxide green pigments (anhydrous and hydrated).	(T)
K007	Wastewater treatment sludge from the production of iron blue pigments.	(T)
K008	Oven residue from the production of chrome oxide green pigments.	(T)
Organic Chemicals:		
K009	Distillation bottoms from the production of acetaldehyde from ethylene.	(T)

Industry and Hazardous Waste No.	Hazardous Waste	Hazard Code
K010	Distillation side cuts from the production of acetaldehyde from ethylene.	(T)
K011	Bottom stream from the wastewater stripper in the production of acrylonitrile.	(R, T)
K013	Bottom stream from the acetonitrile column in the production of acrylonitrile.	(R, T)
K014	Bottoms from the acetonitrile purification column in the production of acrylonitrile.	(T)
K015	Still bottoms from the distillation of benzyl chloride.	(T)
K016	Heavy ends or distillation residues from the production of carbon tetrachloride.	(T)
K017	Heavy ends (still bottoms) from the purification column in the production of epichlorohydrin.	(T)
K018	Heavy ends from the fractionation column in ethyl chloride production.	(T)
K019	Heavy ends from the distillation of ethylene dichloride in ethylene dichloride production.	(T)
K020	Heavy ends from the distillation of vinyl chloride in vinyl chloride monomer production.	(T)
K021	Aqueous spent antimony catalyst waste from fluoromethanes production.	(T)
K022	Distillation bottom tars from the production of phenol/acetone from cumene.	(T)
K023	Distillation light ends from the production of phthalic anhydride from naphthalene.	(T)
K024	Distillation bottoms from the production of phthalic anhydride from naphthalene.	(T)
K025	Distillation bottoms from the production of nitrobenzene by the nitration of benzene.	(T)
K026	Stripping still tails from the production of methyl ethyl pyridines.	(T)
K027	Centrifuge and distillation residues from toluene diisocyanate production.	(R, T)
K028	Spent catalyst from the hydrochlorinator reactor in the production of 1,1,1-trichloroethane.	(T)
K029	Waste from the product steam stripper in the production of 1,1,1-trichloroethane.	(T)
K030	Column bottoms or heavy ends from the combined production of trichloroethylene and perchloroethylene.	(T)
K083	Distillation bottoms from aniline production.	(T)
K085	Distillation or fractionation column bottoms from the production of chlorobenzenes.	(T)
K093	Distillation light ends from the production of phthalic anhydride from ortho-xylene.	(T)
K094	Distillation bottoms from the production of phthalic anhydride from ortho-xylene.	(T)
K095	Distillation bottoms from the production of 1,1,1-trichloroethane.	(T)

Industry and Hazardous Waste No.	Hazardous Waste	Hazard Code
K096	Heavy ends from the heavy ends column from the production of 1,1,1-trichloroethane.	(T)
K103	Process residues from aniline extraction from the production of aniline.	(T)
K104	Combined wastewater streams generated from nitrobenzene/aniline production.	(T)
K105	Separated aqueous stream from the reactor product washing step in the production of chlorobenzenes.	(T)
K107	Column bottoms from product separation from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides.	(C,T)
K108	Condensed column overheads from product separation and condensed reactor vent gases from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides.	(I,T)
K109	Spent filter cartridges from product purification from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides.	(T)
K110	Condensed column overheads from intermediate separation from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides.	(T)
K111	Product washwaters from the production of dinitrotoluene via nitration of toluene.	(C,T)
K112	Reaction byproduct water from the drying column in the production of toluenediamine via hydrogenation of dinitrotoluene.	(T)
K113	Condensed liquid light ends from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene.	(T)
K114	Vicinals from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene.	(T)
K115	Heavy ends from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene	(T)
K116	Organic condensate from the solvent recovery column in the production of toluene diisocyanate via phosgenation of toluenediamine.	(T)
K117	Wastewater from the reactor vent gas scrubber in the production of ethylene dibromide via bromination of ethene.	(T)
K118	Spent adsorbent solids from purification of ethylene dibromide in the production of ethylene dibromide via bromination of ethene.	(T)
K136	Still bottoms from the purification of ethylene dibromide in the production of ethylene dibromide via bromination of ethene.	(T)
K149	Distillation bottoms from the production of alpha- (or methyl-) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups, (this waste does not include still bottoms from the distillation of benzyl chloride).	(T)
K150	Organic residuals, excluding spent carbon adsorbent, from the spent chlorine gas and hydrochloric acid recovery processes associated with the production of alpha- (or methyl-) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups.	(T)

Industry and Hazardous Waste No.	Hazardous Waste	Hazard Code
K151	Wastewater treatment sludges, excluding neutralization and biological sludges, generated during the treatment of wastewaters from the production of alpha- (or methyl-) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups.	(T)
K156	Organic waste (including heavy ends, still bottoms, light ends, spent solvents, filtrates, and decantates) from the production of carbamates and carbamoyl oximes. (This listing does not apply to wastes generated from the manufacture of 3-iodo-2-propynyl n-butylcarbamate.)	(T)
K157	Wastewaters (including scrubber waters, condenser waters, washwaters, and separation waters) from the production of carbamates and carbamoyl oximes. (This listing does not apply to wastes generated from the manufacture of 3-iodo-2-propynyl n-butylcarbamate.)	(T)
K158	Baghouse dusts and filter/separation solids from the production of carbamates and carbamoyl oximes. (This listing does not apply to wastes generated from the manufacture of 3-iodo-2-propynyl n-butylcarbamate.)	(T)
K159	Organics from the treatment of thiocarbamate wastes.	(T)
K161	Purification solids (including filtration, evaporation, and centrifugation solids), bag house dust and floor sweepings from the production of dithiocarbamate acids and their salts. (This listing does not include K125 or K126.)	(R, T)
K174	Wastewater treatment sludges from the production of ethylene dichloride or vinyl chloride monomer (including sludges that result from commingled ethylene dichloride or vinyl chloride monomer wastewater and other wastewater), unless the sludges meet the following conditions: (1) the wastes are disposed of in a hazardous waste or nonhazardous waste landfill licensed or permitted by the state or federal government; (2) the wastes are not otherwise placed on the land prior to final disposal; and (3) the generator maintains documentation demonstrating that the waste was either disposed of in an onsite landfill or consigned to a transporter or disposal facility that provided a written commitment to dispose of the waste in an offsite landfill. Respondents in any action brought to enforce the requirements of article 33-24 must, upon a showing by the department that the respondent managed wastewater treatment sludges from the production of vinyl chloride monomer or ethylene dichloride, demonstrate that the respondent meet the terms of the exclusion set forth above. In doing so, the respondents must provide appropriate documentation (for example, contracts between the generator and the landfill owner or operator, invoices documenting delivery of waste to landfill, etc.) that the terms of the exclusion were met.	(T)
K175	Wastewater treatment sludges from the production of vinyl chloride monomer using mercuric chloride catalyst in an acetylene-based process.	(T)
Inorganic Chemicals:		
K071	Brine purification muds from the mercury cell process in chlorine production, where separately prepurified brine is not used.	(T)
K073	Chlorinated hydrocarbon waste from the purification step of the diaphragm cell process using graphite anodes in chlorine production.	

Industry and Hazardous Waste No.	Hazardous Waste	Hazard Code
K106	Wastewater treatment sludge from the mercury cell process in chlorine production.	(T)
K176	Baghouse filters from the production of antimony oxide, including filters from the production of intermediates (for example, antimony metal or crude antimony oxide).	(E)
K177	Slag from the production of antimony oxide that is speculatively accumulated or disposed, including slag from the production of intermediates (for example, antimony metal or crude antimony oxide).	(T)
K178	Residues from manufacturing and manufacturing-site storage of ferricchloride from acids formed during the production of titanium dioxide using the chloride-ilmenite process.	(T)
Pesticides:		
K031	Byproduct salts generated in the production of MSMA and cacodylic acid.	(T)
K032	Wastewater treatment sludge from the production of chlordane.	(T)
K033	Wastewater and scrub water from the chlorination of cyclopentadiene in the production of chlordane.	(T)
K034	Filter solids from the filtration of hexachlorocyclopentadiene in the production of chlordane.	(T)
K035	Wastewater treatment sludges generated in the production of creosote.	(T)
K036	Still bottoms from toluene reclamation distillation in the production of disulfoton.	(T)
K037	Wastewater treatment sludges from the production of disulfoton.	(T)
K038	Wastewater from the washing and stripping of phorate production.	(T)
K039	Filter cake from the filtration of diethylphosphorodithioic acid in the production of phorate.	(T)
K040	Wastewater treatment sludge from the production of phorate.	(T)
K041	Wastewater treatment sludge from the production of toxaphene.	(T)
K042	Heavy ends or distillation residues from the distillation of tetrachlorobenzene in the production of 2,4,5-T.	(T)
K043	2,6-Dichlorophenol waste from the production 2,4-D.	(T)
K097	Vacuum stripper discharge from the chlordane chlorinator in the production of chlordane.	(T)
K098	Untreated process wastewater from the production of toxaphene.	(T)
K099	Untreated wastewater from the production of 2,4-D.	(T)
K123	Process wastewater (including supernates, filtrates, and washwaters) from the production of ethylenebisdithiocarbamic acid and its salt.	(T)
K124	Reactor vent scrubber water from the production of ethylenebisdithiocarbamic acid and its salts.	(C, T)
K125	Filtration, evaporation, and centrifugation solids from the production of ethylenebisdithiocarbamic acid and its salts.	(T)

Industry and Hazardous Waste No.	Hazardous Waste	Hazard Code
K126	Baghouse dust and floor sweepings in milling and packaging operations from the production or formulation of ethylenebisdithiocarbamic acid and its salts.	(T)
K131	Wastewater from the reactor and spent sulfuric acid from the acid dryer from the production of methyl bromide.	(C, T)
K132	Spent absorbent and wastewater separator solids from the production of methyl bromide.	(T)
Explosives:		
K044	Wastewater treatment sludges from the manufacturing and processing of explosives.	(R)
K045	Spent carbon from the treatment of wastewater containing explosives.	(R)
K046	Wastewater treatment sludges from the manufacturing, formulation and loading of lead-based initiating compounds.	(T)
K047	Pink/red water from TNT operations.	(R)
Petroleum Refining:		
K048	Dissolved air flotation (DAF) float from the petroleum refining industry.	(T)
K049	Slop oil emulsion solids from the petroleum refining industry.	(T)
K050	Heat exchanger bundle cleaning sludge from the petroleum refining industry.	(T)
K051	API separator sludge from the petroleum refining industry.	(T)
K052	Tank bottoms (leaded) from the petroleum refining industry.	(T)
K169	Crude oil storage tank sediment from petroleum refining operations.	(T)
K170	Clarified slurry oil tank sediment or in-line filter/separation solids, or both, from petroleum refining operations.	(T)
K171	Spent hydrotreating catalyst from petroleum refining operations, including guard beds used to desulfurize feeds to other catalytic reactors (this listing does not include inert support media).	(I, T)
K172	Spent hydrorefining catalyst from petroleum refining operations, including guard beds used to desulfurize feeds to other catalytic reactors (this listing does not include inert support media).	(I, T)
Iron and Steel:		
K061	Emission control dust/sludge from the primary production of steel in electric furnaces.	(T)
K062	Spent pickle liquor generated by steel finishing operations of facilities within the iron and steel industry (SIC Codes 331 and 332).	(C, T)
Primary Aluminum:		
K088	Spent potliners from primary aluminum reduction.	(T)

Industry and Hazardous Waste No.	Hazardous Waste	Hazard Code
Secondary Lead:		
K069	Emission control dust/sludge from secondary lead smelting. (Note: This listing is stayed administratively for sludge generated from secondary acid scrubber systems. The stay will remain in effect until further administrative action is taken. If EPA takes further action effecting this stay, EPA will publish a notice of the action in the Federal Register).	(T)
K100	Waste leaching solution from acid leaching of emission control dust/sludge from secondary lead smelting.	(T)
Veterinary Pharmaceuticals:		
K084	Wastewater treatment sludges generated during the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds.	(T)
K101	Distillation tar residues from the distillation of aniline-based compounds in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds.	(T)
K102	Residue from the use of activated carbon for decolorization in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds.	(T)
Ink Formulation:		
K086	Solvent washes and sludges, caustic washes and sludges, or water washes and sludges from cleaning tubs and equipment used in the formulation of ink from pigments, driers, soaps, and stabilizers containing chromium and lead.	(T)
Coking:		
K060	Ammonia still lime sludge from coking operations.	(T)
K087	Decanter tank tar sludge from coking operations.	(T)
K141	Process residues from the recovery of coal tar, including, but not limited to, collecting sump residues from the production of coke from coal or the recovery of coke byproducts produced from coal. This listing does not include K087 (decanter tank tar sludges from coking operations).	(T)
K142	Tar storage tank residues from the production of coke from coal or from the recovery of coke byproducts produced from coal.	(T)
K143	Process residues from the recovery of light oil, including, but not limited to, those generated in stills, decanters, and wash oil recovery units from the recovery of coke byproducts produced from coal.	(T)
K144	Wastewater sump residues from light oil refining, including, but not limited to, intercepting or contamination sump sludges from the recovery of coke byproducts produced from coal.	(T)
K145	Residues from naphthalene collection and recovery operations from the recovery of coke byproducts produced from coal.	(T)

Industry and Hazardous Waste No.	Hazardous Waste	Hazard Code
K147	Tar storage tank residues from coal tar refining.	(T)
K148	Residues from coal tar distillation, including but not limited to, still bottoms.	(T)

History: Effective January 1, 1984; amended effective October 1, 1986; December 1, 1988; December 1, 1991; January 1, 1994; July 1, 1997; December 1, 2003.
General Authority: NDCC 23-20.3-03
Law Implemented: NDCC 23-20.3-03, 23-20.3-04

33-24-02-18. Discarded commercial chemical products, off-specification species, container residues, and spill residues thereof. The following materials or items are hazardous wastes if and when they are discarded or intended to be discarded as described in paragraph 1 of subdivision b of subsection 1 of section 33-24-02-02, when they are mixed with waste oil or used oil or other material and applied to the land for dust suppression or road treatment, when they are otherwise applied to the land in lieu of their original intended use or when they are contained in products that are applied to the land in lieu of their original intended use, or when, in lieu of their original intended use, they are produced for use as (or as a component of) a fuel, distributed for use as a fuel, or burned as a fuel.

1. Any commercial chemical product, manufacturing chemical intermediate, or any mixture of the chemicals having the generic name listed in subsection 5 or 6.

2. Any off-specification commercial chemical product, manufacturing chemical intermediate, or any mixture of the chemicals which, if it met specifications, would have the generic name listed in subsection 5 or 6.

3. Any residue remaining in a container or in an inner liner removed from a container that has held any commercial chemical product, manufacturing chemical intermediate, or any mixture of the chemicals having the generic name listed in subsection 5 or 6, unless the container is empty as defined in subsection 2 of section 33-24-02-07.

   (NOTE: Unless the residue is being beneficially used or legitimately recycled or reclaimed; or being accumulated, stored, transported, or treated prior to such use, reuse, recycling, or reclamation, the department considers the residue to be intended for discard, and thus a hazardous waste. An example of a legitimate reuse of the residue would be when the residue remains in the container and the container is used to hold the same commercial chemical product or manufacturing chemical intermediate it previously held. An example of the discard of the residue would be when the drum is sent to a drum reconditioner who reconditions the drum but discards the residue.)

4. Any residue or contaminated soil, water, or other debris, resulting from the cleanup of a spill, into or on any land or water, of any commercial chemical product, manufacturing chemical intermediate, or mixture of the chemicals having the generic name listed in subsection 5 or 6, or any residue or contaminated soil, water, or other debris resulting from the cleanup of a spill into or on any land or water of any off-specification chemical product, manufacturing chemical intermediate, or mixture of the chemicals, which, if it met specifications would have the generic name listed in subsection 5 or 6. (Comment: The phrase "commercial chemical product or manufacturing chemical intermediate having the generic name listed in . . ." refers to a chemical substance which is manufactured or formulated for commercial or manufacturing use, which consists of the commercially pure grade of the chemical, any technical grades of the chemical, that are produced or marketed, and all formulations containing one or more of the chemicals having the generic name listed in subsection 5 or 6 as active ingredients. It does not refer to a material, such as a manufacturing process waste, that contains any of the substances listed in subsection 5 or 6. Where a manufacturing process is deemed to be a hazardous waste because it contains a substance listed in subsection 5 or 6, such wastes will be listed in either section 33-24-02-16 or 33-24-02-17 or will be identified as a hazardous waste by the characteristic set forth in this chapter.)

5. The commercial chemical products, manufacturing chemical intermediates, off-specification commercial chemical products or manufacturing chemical intermediates, or mixtures of the chemicals referred to in subsections 1 through 4, are identified as acute hazardous wastes (H) and are subject to the small quantity exclusion defined in subsection 5 of section 33-24-02-05. These wastes and their corresponding hazardous waste numbers are:

Hazardous Waste No.	Chemical Abstracts No.	Substance
P023	107-20-0	Acetaldehyde, chloro-
P002	591-08-2	Acetamide, N-(aminothioxomethyl)-
P057	640-19-7	Acetamide, 2-fluoro-
P058	62-74-8	Acetic acid, fluoro-, sodium salt
P002	591-08-2	1-Acetyl-2-thiourea
P003	107-02-8	Acrolein
P203	1646-88-4	Aldicarb sulfone
P070	116-06-3	Aldicarb
P004	309-00-2	Aldrin
P005	107-18-6	Allyl alcohol
P006	20859-73-8	Aluminum phosphide (R, T)
P007	2763-96-4	5-(Aminomethyl)-3-isoxazolol
P008	504-24-5	4-Aminopyridine

Hazardous Waste No.	Chemical Abstracts No.	Substance
P009	131-74-8	Ammonium picrate (R)
P119	7803-55-6	Ammonium vanadate
P099	506-61-6	Argentate (1-), bis(cyano-C)-, potassium
P010	7778-39-4	Arsenic acid H_3AsO_4
P012	1327-53-3	Arsenic oxide As_2O_3
P011	1303-28-2	Arsenic oxide As_2O_5
P011	1303-28-2	Arsenic pentoxide
P012	1327-53-3	Arsenic trioxide
P038	692-42-2	Arsine, diethyl
P036	696-28-6	Arsonous dichloride, phenyl-
P054	151-56-4	Aziridine
P067	75-55-8	Aziridine, 2-methyl-
P013	542-62-1	Barium cyanide
P024	106-47-8	Benzenamine, 4-chloro-
P077	100-01-6	Benzenamine, 4-nitro-
P028	100-44-7	Benzene, (chloromethyl)-
P042	51-43-4	1,2-Benzenediol, 4-[1-hydroxy-2-(methylamino)ethyl]-,(R)-
P046	122-09-8	Benzeneethanamine, alpha, alpha-dimethyl-
P014	108-98-5	Benzenethiol
P127	1563-66-2	7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-, methylcarbamate
P188	57-64-7	Benzoic acid, 2-hydroxy-, compd. with (3aS-cis)-1,2,3,3a,8,8a-hexahydro-1,3a,8-trimethylpyrrolo[2,3-b]indol -5-yl methylcarbamate ester (1:1)
P001	[1]81-81-2	2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenylbutyl)-, & salts, when present at concentrations greater than 0.3%
P028	100-44-7	Benzyl chloride
P015	7440-41-7	Beryllium powder
P017	598-31-2	Bromoacetone
P018	357-57-3	Brucine
P045	39196-18-4	2-Butanone, 3,3-dimethyl-1-(methylthio)-,O-[methylamino)carbonyl] oxime
P021	592-01-8	Calcium cyanide
P021	592-01-8	Calcium cyanide $Ca(CN)_2$
P189	55285-14-8	Carbamic acid, [(dibutylamino)-thio]methyl-,2,3-dihydro-2,2-dimethyl-7-benzofuranyl ester
P191	644-64-4	Carbamic acid, dimethyl-,1-[(dimethyl-amino)carbonyl]-5-methyl-1H-pyrazol-3-yl ester
P192	119-38-0	Carbamic acid, dimethyl-, 3-methyl-1- (1-methylethyl)-1H-pyrazol-5-yl ester
P190	1129-41-5	Carbamic acid, methyl-, 3-methylphenyl ester
P127	1563-66-2	Carbofuran

Hazardous Waste No.	Chemical Abstracts No.	Substance
P022	75-15-0	Carbon disulfide
P095	75-44-5	Carbonic dichloride
P189	55285-14-8	Carbosulfan
P023	107-20-0	Chloroacetaldehyde
P024	106-47-8	p-Chloroaniline
P026	5344-82-1	1-(o-Chlorophenyl)thiourea
P027	542-76-7	3-Chloropropionitrile
P029	544-92-3	Copper cyanide
P029	544-92-3	Copper cyanide Cu(CN)
P202	64-00-6	m-Cumenyl methylcarbamate
P030	.....	Cyanides (soluble cyanide salts), not otherwise specified
P031	460-19-5	Cyanogen
P033	506-77-4	Cyanogen chloride
P033	506-77-4	Cyanogen chloride (CN)Cl
P034	131-89-5	2-Cyclohexyl-4,6-dinitrophenol
P016	542-88-1	Dichloromethyl ether
P036	696-28-6	Dichlorophenylarsine
P037	60-57-1	Dieldrin
P038	692-42-2	Diethylarsine
P041	311-45-5	Diethyl-p-nitrophenyl phosphate
P040	297-97-2	O,O-Diethyl O-pyrazinyl phosphorothioate
P043	55-91-4	Diisopropylfluorophosphate (DFP)
P004	309-00-2	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-1,4,4a,5,8, 8a-hexahydro-,(1alpha,4alpha,4abeta, 5alpha,8alpha,8abeta)-
P060	465-73-6	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-1,4,4a,5,8, 8a-hexahydro-,(1alpha,4alpha,4abeta,5beta,8beta,8abeta)-
P037	60-57-1	2,7:3,6-Dimethanonaphth[2,3b]oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-,(1aalpha,2beta,2aalpha, 3beta,6beta,6aalpha,7beta,7aalpha)-
P051	[1]72-20-8	2,7:3,6-Dimethanonaphth[2,3-b]oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro,(1aalpha,2beta,2abeta, 3alpha,6alpha,6abeta,7beta,7aalpha)-, & metabolites
P044	60-51-5	Dimethoate
P046	122-09-8	alpha, alpha-Dimethylphenthylamine
P191	644-64-4	Dimetilan
P047	[1]534-52-1	4,6-Dinitro-o-cresol and salts
P048	51-28-5	2,4-Dinitrophenol
P020	88-85-7	Dinoseb
P085	152-16-9	Diphosphoramide, octamethyl-
P111	107-49-3	Diphosphoric acid, tetraethyl ester

Hazardous Waste No.	Chemical Abstracts No.	Substance
P039	298-04-4	Disulfoton
P049	541-53-7	Dithiobiuret
P185	26419-73-8	1,3-Dithiolane-2-carboxaldehyde, 2,4-dimethyl-, O-[(methylamino)-carbonyl]oxime
P050	115-29-7	Endosulfan
P088	145-73-3	Endothall
P051	72-20-8	Endrin
P051	72-20-8	Endrin, & metabolites
P042	51-43-4	Epinephrine
P031	460-19-5	Ethanedinitrile
P066	16752-77-5	Ethanimidothioic acid, N-[[(methylamino)carbonyl]oxy]-,methylester
P194	23135-22-0	Ethanimidothioc acid, 2-(dimethylamino)-N-[[(methylamino) carbonyl]oxy] -2-oxo-,methyl ester
P101	107-12-0	Ethyl cyanide
P054	151-56-4	Ethyleneimine
P097	52-85-7	Famphur
P056	7782-41-4	Fluorine
P057	640-19-7	Fluoroacetamide
P058	62-74-8	Fluoroacetic acid, sodium salt
P198	23422-53-9	Formetanate hydrochloride
P197	17702-57-7	Formparanate
P065	628-86-4	Fulminic acid, mercury(2+)salt (R,T)
P059	76-44-8	Heptachlor
P062	757-58-4	Hexaethyl tetraphosphate
P116	79-19-6	Hydrazinecarbothioamide
P068	60-34-4	Hydrazine, methyl-
P063	74-90-8	Hydrocyanic acid
P063	74-90-8	Hydrogen cyanide
P096	7803-51-2	Hydrogen phosphide
P060	465-73-6	Isodrin
P192	119-38-0	Isolan
P202	64-00-6	3-Isopropylphenyl N-methylcarbamate
P007	2763-96-4	3(2H)-Isoxazolone, 5-(aminomethyl)-
P196	15339-36-3	Manganese, bis(dimethylcarbamodithioato-S,S')-,
P196	15339-36-3	Manganese dimethyldithiocarbamate
P092	62-38-4	Mercury, (acetato-O)phenyl-
P065	628-86-4	Mercury fulminate (R,T)
P082	62-75-9	Methanamine, N-methyl-N-nitroso-

Hazardous Waste No.	Chemical Abstracts No.	Substance
P064	624-83-9	Methane, isocyanato-
P016	542-88-1	Methane, oxybis[chloro-
P112	509-14-8	Methane, tetranitro- (R)
P118	75-70-7	Methanethiol, trichloro-
P198	23422-53-9	Methanimidamide, N,N-dimethyl-N'-[3-[[(methylamino)-carbonyl]oxy]phenyl]-, monohydrochloride
P197	17702-57-7	Methanimidamide, N,N-dimethyl-N'-[2-methyl-4-[[(methylamino)carbonyl]oxy]phenyl]-
P050	115-29-7	6,9-Methano-2,4,3-benxodioxathiepin, 6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a-hexahydro-, 3-oxide
P059	76-44-8	4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro-
P199	2032-65-7	Methiocarb
P066	16752-77-5	Methomyl
P068	60-34-4	Methyl hydrazine
P064	624-83-9	Methyl isocyanate
P069	75-86-5	2-Methyllactonitrile
P071	298-00-0	Methyl parathion
P190	1129-41-5	Metolcarb
P128	315-18-4	Mexacarbamate
P072	86-88-4	alpha-Naphthylthiourea
P073	13463-39-3	Nickel carbonyl
P073	13463-39-3	Nickel carbonyl $Ni(CO)_4$, (T-4)-
P074	557-19-7	Nickel cyanide
P074	557-19-7	Nickel cynaide $Ni(CN)_2$
P075	[1]54-11-5	Nicotine and salts
P076	10102-43-9	Nitric oxide
P077	100-01-6	p-Nitroaniline
P078	10102-44-0	Nitrogen dioxide
P076	10102-43-9	Nitrogen oxide NO
P078	10102-44-0	Nitrogen oxide NO_2
P081	55-63-0	Nitroglycerine (R)
P082	62-75-9	N-Nitrosodimethylamine
P084	4549-40-0	N-Nitrosomethylvinylamine
P085	152-16-9	Octamethylpyrophosphoramide
P087	20816-12-0	Osmium oxide OsO_4,(T-4)-
P087	20816-12-0	Osmium tetroxide
P088	145-73-3	7-Oxabicyclo[2.2.1]heptane-2,3-dicarboxylic acid
P194	23135-22-0	Oxamyl

Hazardous Waste No.	Chemical Abstracts No.	Substance
P089	56-38-2	Parathion
P034	131-89-5	Phenol, 2-cyclohexyl-4,6-dinitro-
P128	315-18-4	Phenol, 4-(dimethylamino)-3,5-dimethyl-,methylcarbamate(ester)
P199	2032-65-7	Phenol, (3,5-dimethyl-4-(methylthio)-, methylcarbamate
P048	51-28-5	Phenol, 2,4-dinitro-
P047	[1]534-52-1	Phenol, 2-methyl-4,6-dintro-, and salts
P202	64-00-6	Phenol, 3-(1-methylethyl)-, methyl carbamate
P201	2631-37-0	Phenol, 3-methyl-5-(1-methylethyl)-, methyl carbamate
P020	88-85-7	Phenol, 2-(1-methylpropyl)-4,6-dinitro-
P009	131-74-8	Phenol, 2,4,6-trinitro-, ammonium salt (R)
P092	62-38-4	Phenylmercury acetate
P093	103-85-5	Phenylthiourea
P094	298-02-2	Phorate
P095	75-44-5	Phosgene
P096	7803-51-2	Phosphine
P041	311-45-5	Phosphoric acid, diethyl 4-nitrophenyl ester
P039	298-04-4	Phosphorodithioic acid, O,O-diethyl S-[2-(ethylthio)ethyl]ester
P094	298-02-2	Phosphorodithioic acid, O,O-diethyl S-[(ethylthio)methyl]ester
P044	60-51-5	Phosphorodithioic acid, O,O-dimethyl S-[2-(methylamino)-2-oxoethyl]ester
P043	55-91-4	Phosphorofluoridic acid, bis(1-methylethyl) ester
P089	56-38-2	Phosphorothioic acid, O,O-diethyl O-(4-nitrophenyl) ester
P040	297-97-2	Phosphorothioic acid, O,O-diethyl O-pyrazinyl ester
P097	52-85-7	Phosphorothioic acid, O-[4-[(dimethylamino)sulfonyl]phenyl] O,O-dimethylester
P071	298-00-0	Phosphorothioic acid, O,O-dimethyl O-(4-nitrophenyl)ester
P204	57-47-6	Physostigmine
P188	57-64-7	Physostigmine salicylate
P110	78-00-2	Plumbane, tetraethyl-
P098	151-50-8	Potassium cyanide
P098	151-50-8	Potassium cyanide K(CN)
P099	506-61-6	Potassium silver cyanide
P201	2631-37-0	Promecarb
P070	116-06-3	Propanal, 2-methyl-2-(methylthio)-,O-[(methylamino)carbonyl]oxime
P203	1646-88-4	Propanal, 2-methyl-2-(methyl-sulfonyl)-,O-[(methylamino)carbonyl] oxime
P101	107-12-0	Propanenitrile
P027	542-76-7	Propanenitrile, 3-chloro-
P069	75-86-5	Propanenitrile, 2-hydroxy-2methyl-
P081	55-63-0	1,2,3-Propanetriol, trinitrate (R)
P017	598-31-2	2-Propanone, 1-bromo-

Hazardous Waste No.	Chemical Abstracts No.	Substance
P102	107-19-7	Propargyl alcohol
P003	107-02-8	2-Propenal
P005	107-18-6	2-Propen-1-ol
P067	75-55-8	1,2-Propylenimine
P102	107-19-7	2-Propyn-1-ol
P008	504-24-5	Pyridianamine
P075	[1]54-11-5	Pyridine, 3-(1-methyl-2-pyrrolidinyl)-, (S), & salts
P204	57-47-6	Pyrrolo[2,3-b]indol-5-ol,1,2,3,3a,8,8a-hexahydro-1,3a,8-trimethyl-methylcarbamate (ester), (3aS-cis)-
P114	12039-52-0	Selenious acid, dithallium(+1) salt
P103	630-10-4	Selenourea
P104	506-64-9	Silver cyanide
P104	506-64-9	Silver cyanide Ag(CN)
P105	26628-22-8	Sodium azide
P106	143-33-9	Sodium cyanide
P106	143-33-9	Sodium cyanide Na(CN)
P108	[1]57-24-9	Strychnidin-10-one, and salts
P018	357-57-3	Strychnidin-10-one, 2,3-dimethoxy-
P108	[1]57-24-9	Strychnine and salts
P115	7446-18-6	Sulfuric acid, dithallium(1+)salt
P109	3689-24-5	Tetraethyldithiopyrophosphate
P110	78-00-2	Tetraethyl lead
P111	107-49-3	Tetraethyl pyrophosphate
P112	509-14-8	Tetranitromethane (R)
P062	757-58-4	Tetraphosphoric acid, hexaethyl ester
P113	1314-32-5	Thallic oxide
P113	1314-32-5	Thallium oxide Tl_2O_3
P114	12039-52-0	Thallium(I) selenite
P115	7446-18-6	Thallium(I) sulfate
P109	3689-24-5	Thiodiphosphoric acid, tetraethyl ester
P045	39196-18-4	Thiofanox
P049	541-53-7	Thioimidodicarbonic diamide $[(H_2N)C(S)]_2NH$
P014	108-98-5	Thiophenol
P116	79-19-6	Thiosemicarbazide
P026	5344-82-1	Thiourea, (2-chlorophenyl)-
P072	86-88-4	Thiourea, 1-naphthalenyl-
P093	103-85-5	Thiourea, phenyl-
P185	26419-73-8	Tirpate

Hazardous Waste No.	Chemical Abstracts No.	Substance
P123	80201-35-2	Toxaphene
P118	75-70-7	Trichloromethanethiol
P119	7803-55-6	Vanadic acid, ammonium salt
P120	1314-62-1	Vanadium oxide V_2O_5
P120	1314-62-1	Vanadium pentoxide
P084	4549-40-0	Vinylamine, N-methyl-N-nitroso-
P001	[1]81-81-2	Warfarin, & salts, when present at concentrations greater than 0.3%
P205	137-30-4	Zinc, bis(dimethylcarbamodithioato-S,S')-,
P121	557-21-1	Zinc cyanide
P121	557-21-1	Zinc cyanide $Zn(CN)_2$
P122	1314-84-7	Zinc phosphide Zn_3P_2, when present at concentrations greater than 10% (R,T)
P205	137-30-4	Ziram.

[1]CAS number given for parent compound only.

6. The commercial chemical products, manufacturing chemical intermediates, off-specification commercial chemical products, or mixtures of the chemicals referred to in subsections 1 through 4, are identified as toxic wastes (T) unless otherwise designated and are subject to the small quantity exclusion defined in subsections 1 and 7 of section 33-24-02-05.

   (Comment: For the convenience of the regulated community, the primary hazardous properties of thse materials have been indicated by the letters T (toxicity), R (reactivity), I (ignitability), and C (corrosivity). Absence of a letter indicates that the compound is only listed for toxicity.)

   These wastes and their corresponding hazardous waste numbers are:

Hazardous Waste No.	Chemical Abstracts No.	Substance
U394	30558-43-1	A2213
U001	75-07-0	Acetaldehyde (I)
U034	75-87-6	Acetaldehyde, trichloro-
U187	62-44-2	Acetamide, N-(4-ethoxyphenyl)-
U005	53-96-3	Acetamide, N-9H-fluoren-2-yl
U240	[1]94-75-7	Acetic acid, (2,4-dichlorophenoxy)-, salts & esters
U112	141-78-6	Acetic acid, ethyl ester (I)
U144	301-04-2	Acetic acid, lead(2+) salt
U214	563-68-8	Acetic acid, thallium (1+) salt
See F027	93-76-5	Acetic acid, (2,4,5-trichlorophenoxy)-

Hazardous Waste No.	Chemical Abstracts No.	Substance
U002	67-64-1	Acetone (I)
U003	75-05-8	Acetonitrile (I,T)
U004	98-86-2	Acetophenone
U005	53-96-3	2-Acetylaminofluorene
U006	75-36-5	Acetyl chloride (C,R,T)
U007	79-06-1	Acrylamide
U008	79-10-7	Acrylic acid (I)
U009	107-13-1	Acrylonitrile
U011	61-82-5	Amitrole
U012	62-53-3	Aniline (I,T)
U136	75-60-5	Arsinic acid, dimethyl-
U014	492-80-8	Auramine
U015	115-02-6	Azaserine
U010	50-07-7	Azirino[2',3':3,4]pyrrolo[1,2-a]indole-4,7-dione, 6-amino-8-[[(aminocarbonyl)oxy]methyl]-1,1a,2,8,8a,8b-hexahydro-8a-methoxy-5-methyl-[1aS-(1aalpha, 8beta, 8aalpha, 8balpha)]-
U280	101-27-9	Barban
U278	22781-23-3	Bendiocarb
U364	22961-82-6	Bendiocarb phenol
U271	17804-35-2	Benomyl
U157	56-49-5	Benz[j[aceanthrylene, 1,2-dihydro-3-methyl-
U016	225-51-4	Benz[c]acridine
U017	98-87-3	Benzal chloride
U192	23950-58-5	Benzamide, 3,5-dichloro-N-(1,1-dimethyl-2-propynyl)-
U018	56-55-3	Benz[a]anthracene
U094	57-97-6	Benz[a]anthracene, 7,12-dimethyl-
U012	62-53-3	Benzenamine (I,T)
U014	492-80-8	Benzenamine, 4,4'-carbonimidoylbis[N,N-dimethyl-
U049	3165-93-3	Benzenamine, 4-chloro-2-methyl-, hydrochloride
U093	60-11-7	Benzenamine, N,N-dimethyl-4-(phenylazo)-
U328	95-53-4	Benzenamine, 2-methyl-
U353	106-49-0	Benzenamine, 4-methyl-
U158	101-14-4	Benzenamine, 4,4'-methylenebis[2-chloro-
U222	636-21-5	Benzenamine, 2-methyl-, hydrochloride
U181	99-55-8	Benzenamine, 2-methyl-5-nitro-
U019	71-43-2	Benzene (I,T)
U038	510-15-6	Benzeneacetic acid, 4-chloro-alpha-(4-chlorophenyl)-alpha-hydroxy-,ethyl ester
U030	101-55-3	Benzene, 1-bromo-4-phenoxy-

Hazardous Waste No.	Chemical Abstracts No.	Substance
U035	305-03-3	Benzenebutanoic acid, 4-[bis(2-chloroethyl)amino]-
U037	108-90-7	Benzene, chloro-
U221	25376-45-8	Benzenediamine, ar-methyl-
U028	117-81-7	1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester
U069	84-74-2	1,2-Benzenedicarboxylic acid, dibutyl ester
U088	84-66-2	1,2-Benzenedicarboxylic acid, diethyl ester
U102	131-11-3	1,2-Benzenedicarboxylic acid, dimethyl ester
U107	117-84-0	1,2-Benzenedicarboxylic acid, dioctyl ester
U070	95-50-1	Benzene, 1,2-dichloro-
U071	541-73-1	Benzene, 1,3-dichloro-
U072	106-46-7	Benzene, 1,4-dichloro-
U060	72-54-8	Benzene, 1,1'-(2,2-dichloroethylidene)bis[4-chloro-
U017	98-87-3	Benzene, (dichloromethyl)-
U223	26471-62-5	Benzene, 1,3-diisocyanatomethyl- (R,T)
U239	1330-20-7	Benzene, dimethyl- (I,T)
U201	108-46-3	1,3-Benzenediol
U127	118-74-1	Benzene, hexachloro-
U056	110-82-7	Benzene, hexahydro- (I)
U220	108-88-3	Benzene, methyl-
U105	121-14-2	Benzene, 1-methyl-2,4-dinitro-
U106	606-20-2	Benzene, 2-methyl-1,3-dinitro-
U055	98-82-8	Benzene, (1-methylethyl)-(I)
U169	98-95-3	Benzene, nitro-
U183	608-93-5	Benzene, pentachloro-
U185	82-68-8	Benzene, pentachloronitro-
U020	98-09-9	Benzenesulfonic acid chloride (C,R)
U020	98-09-9	Benzenesulfonyl chloride (C,R)
U207	95-94-3	Benzene, 1,2,4,5-tetrachloro-
U061	50-29-3	Benzene, 1,1'-(2,2,2-trichloroethylidene)bis[4-chloro-
U247	72-43-5	Benzene, 1,1'-(2,2,2-trichloroethylidene)bis[4-methoxy-
U023	98-07-7	Benzene, (trichloromethyl)-
U234	99-35-4	Benzene, 1,3,5-trinitro-
U021	92-87-5	Benzidine
U202	[1]81-07-2	1,2-Benzisothiazol-3(2H)-one, 1,1-dioxide, & salts
U278	22781-23-3	1,3-Benzodioxol-4-ol, 2,2-dimethyl-, methyl carbamate.
U364	22961-82-6	1,3-Benzodioxol-4-ol, 2,2-dimethyl-,
U203	94-59-7	1,3-Benzodioxole, 5-(2-propenyl)-
U141	120-58-1	1,3-Benzodioxole, 5-(1-propenyl)-

Hazardous Waste No.	Chemical Abstracts No.	Substance
U090	94-58-6	1,3-Benzodioxole, 5-propyl-
U367	1563-38-8	7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-
U064	189-55-9	Benzo[rst]pentaphene
U248	[1]81-81-2	2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenyl-butyl)-, & salts, when present at concentrations of 0.3% or less
U022	50-32-8	Benzo[a]pyrene
U197	106-51-4	p-Benzoquinone
U023	98-07-7	Benzotrichloride (C,R,T)
U085	1464-53-5	2,2'-Bioxirane
U021	92-87-5	[1,1'-Biphenyl]-4,4'-diamine
U073	91-94-1	[1,1'Biphenyl]-4,4'-diamine, 3,3'-dichloro-
U091	119-90-4	[1,1'-Biphenyl]-4,4'-diamine, 3,3'-dimethoxy-
U095	119-93-7	[1,1'-Biphenyl]-4,4'-diamine, 3,3'-dimethyl-
U225	75-25-2	Bromoform
U030	101-55-3	4-Bromophenyl phenyl ether
U128	87-68-3	1,3-Butadiene, 1,1,2,3,4,4-hexachloro-
U172	924-16-3	1-Butanamine, N-butyl-N-nitroso-
U031	71-36-3	1-Butanol (I)
U159	78-93-3	2-Butanone (I,T)
U160	1338-23-4	2-Butanone peroxide (R,T)
U053	4170-30-3	2-Butenal
U074	764-41-0	2-Butene, 1,4-dichloro- (I,T)
U143	303-34-4	2-Butenoic acid, 2-methyl-, 7-[[2,3-dihydroxy-2-(1-methoxyethy)-3-methyl-1-oxobutoxy]methyl]-2,3,5,7a-tetrahydro-1H-pyrrolizin-1-yl ester,[1S-[1alpha(Z),7(2S*,3R*), 7aalpha]]-
U031	71-36-3	n-Butyl alcohol (I)
U136	75-60-5	Cacodylic acid
U032	13765-19-0	Calcium chromate
U372	10605-21-7	Carbamic acid, 1H-benzimidazol-2-yl, methyl ester
U271	17804-35-2	Carbamic acid, [1-[(butylamino)carbonyl]-1H-benzimidazol-2-yl]-,methyl ester
U280	101-27-9	Carbamic acid, (3-chlorophenyl)-, 4-chloro-2-butynyl ester
U238	51-79-6	Carbamic acid, ethyl ester
U178	615-53-2	Carbamic acid, methylnitroso-, ethyl ester
U373	122-42-9	Carbamic acid, phenyl-, 1-methylethyl ester.
U409	23564-05-8	Carbamic acid, [1,2-phenylenebis (iminocarbonothioyl)]bis-,dimethyl ester
U097	79-44-7	Carbamic chloride, dimethyl-
U114	[1]111-54-6	Carbamodithioic acid, 1,2-ethanediylbis-, salts and esters
U062	2303-16-4	Carbamothioic acid, bis(1-methylethyl)-, S-(2,3-dichloro-2-propenyl) ester

Hazardous Waste No.	Chemical Abstracts No.	Substance
U389	2303-17-5	Carbamothioic acid, bis(1-methylethyl)-, S-(2,3,3-trichloro-2-propenyl) ester
U387	52888-80-9	Carbamothioic acid, dipropyl-, S-(phenylmethyl) ester
U279	63-25-2	Carbaryl
U372	10605-21-7	Carbendazim
U367	1563-38-8	Carbofuran phenol
U215	6533-73-9	Carbonic acid, dithallium(1+) salt
U033	353-50-4	Carbon difluoride
U156	79-22-1	Carbonochloridic acid, methyl ester (I,T)
U033	353-50-4	Carbon oxyfluoride (R,T)
U211	56-23-5	Carbon tetrachloride
U034	75-87-6	Chloral
U035	305-03-3	Chlorambucil
U036	57-74-9	Chlordane, alpha & gamma isomers
U026	494-03-1	Chlornaphazine
U037	108-90-7	Chlorobenzene
U038	510-15-6	Chlorobenzilate
U039	59-50-7	4-Chloro-m-cresol
U042	110-75-8	2-Chloroethyl vinyl ether
U044	67-66-3	Chloroform
U046	107-30-2	Chloromethyl methyl ether
U047	91-58-7	beta-Chloronaphthalene
U048	95-57-8	o-Chlorophenol
U049	3165-93-3	4-Chloro-o-toluidine, hydrochloride
U032	13765-19-0	Chromic acid H_2CrO_4, calcium salt
U050	218-01-9	Chrysene
U051	.....	Creosote
U052	1319-77-3	Cresol (Cresylic acid)
U053	4170-30-3	Crotonaldehyde
U055	98-82-8	Cumene (I)
U246	506-68-3	Cyanogen bromide (CN)Br
U197	106-51-4	2,5-Cyclohexadiene-1,4-dione
U056	110-82-7	Cyclohexane (I)
U129	58-89-9	Cyclohexane, 1,2,3,4,5,6-hexachloro-,(1alpha,2alpha,3beta,4alpha,5alpha,6beta)
U057	108-94-1	Cyclohexanone (I)
U130	77-47-4	1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro-
U058	50-18-0	Cyclophosphamide
U240	[1]94-75-7	2,4-D, salts and esters

Hazardous Waste No.	Chemical Abstracts No.	Substance
U059	20830-81-3	Daunomycin
U060	72-54-8	DDD
U061	50-29-3	DDT
U062	2303-16-4	Diallate
U063	53-70-3	Dibenz[a,h]anthracene
U064	189-55-9	Dibenzo[a,i]pyrene
U066	96-12-8	1,2-Dibromo-3-chloropropane
U069	84-74-2	Dibutyl phthalate
U070	95-50-1	o-Dichlorobenzene
U071	541-73-1	m-Dichlorobenzene
U072	106-46-7	p-Dichlorobenzene
U073	91-94-1	3,3'-Dichlorobenzidine
U074	764-41-0	1,4-Dichloro-2-butene (I,T)
U075	75-71-8	Dichlorodifluoromethane
U078	75-35-4	1,1-Dichloroethylene
U079	156-60-5	1,2-Dichloroethylene
U025	111-44-4	Dichloroethyl ether
U027	108-60-1	Dichloroisopropyl ether
U024	111-91-1	Dichloromethoxy ethane
U081	120-83-2	2,4-Dichlorophenol
U082	87-65-0	2,6-Dichlorophenol
U084	542-75-6	1,3-Dichloropropene
U085	1464-53-5	1,2:3,4-Diepoxybutane (I,T)
U395	5952-26-1	Diethylene glycol, dicarbamate
U108	123-91-1	1,4-Diethyleneoxide
U028	117-81-7	Diethylhexyl phthalate
U086	1615-80-1	N,N'-Diethylhydrazine
U087	3288-58-2	O,O-DiethylS-methyl-dithiophosphate
U088	84-66-2	Diethyl phthalate
U089	56-53-1	Diethylstilbesterol
U090	94-58-6	Dihydrosafrole
U091	119-90-4	3,3'-Dimethoxybenzidine
U092	124-40-3	Dimethylamine (I)
U093	60-11-7	p-Dimethylaminoazobenzene
U094	57-97-6	7,12-Dimethylbenz[a]anthracene
U095	119-93-7	3,3'-Dimethylbenzidine
U096	80-15-9	alpha,alpha-Dimethylbenzlhydroperoxide (R)
U097	79-44-7	Dimethylcarbamoyl chloride

Hazardous Waste No.	Chemical Abstracts No.	Substance
U098	57-14-7	1,1-Dimethylhydrazine
U099	540-73-8	1,2-Dimethylhydrazine
U101	105-67-9	2,4-Dimethylphenol
U102	131-11-3	Dimethyl phthalate
U103	77-78-1	Dimethyl sulfate
U105	121-14-2	2,4-Dinitrotoluene
U106	606-20-2	2,6-Dinitrotoluene
U107	117-84-0	Di-n-octyl phthalate
U108	123-91-1	1,4-Dioxane
U109	122-66-7	1,2-Diphenylhydrazine
U110	142-84-7	Dipropylamine (I)
U111	621-64-7	Di-n-propylnitrosamine
U041	106-89-8	Epichlorohydrin
U001	75-07-0	Ethanal (I)
U174	55-18-5	Ethanamine, N-ethyl-N-nitroso-
U404	121-44-8	Ethanamine, N,N-diethyl-
U155	91-80-5	1,2-Ethanediamine, N,N-dimethyl-N'-2-pyridinyl-N'-(2-thienylmethyl)-
U067	106-93-4	Ethane, 1,2-dibromo-
U076	75-34-3	Ethane, 1,1-dichloro-
U077	107-06-2	Ethane, 1,2-dichloro-
U131	67-72-1	Ethane, hexachloro-
U024	111-91-1	Ethane, 1,1'-[methylenebis(oxy)]bis[2-chloro-
U117	60-29-7	Ethane, 1,1'-oxybis- (I)
U025	111-44-4	Ethane, 1,1'-oxybis[2-chloro-
U184	76-01-7	Ethane, pentachloro-
U208	630-20-6	Ethane, 1,1,1,2-tetrachloro-
U209	79-34-5	Ethane, 1,1,2,2-tetrachloro-
U218	62-55-5	Ethanethioamide
U226	71-55-6	Ethane, 1,1,1-trichloro-
U227	79-00-5	Ethane, 1,1,2-trichloro-
U394	30558-43-1	Ethanimidothioic acid, 2-(dimethylamino)-N-hydroxy-2-oxo-, methyl ester.
U410	59669-26-0	Ethanimidothioic acid, N,N'- [thiobis[(methylimino)carbonyloxy]]bis-, dimethyl ester
U359	110-80-5	Ethanol, 2-ethoxy-
U173	1116-54-7	Ethanol, 2,2'-(nitrosoimino)bis-
U395	5952-26-1	Ethanol, 2,2'-oxybis-, dicarbamate.
U004	98-86-2	Ethanone, 1-phenyl-
U043	75-01-4	Ethene, chloro-

Hazardous Waste No.	Chemical Abstracts No.	Substance
U042	110-75-8	Ethene, (2-chloroethoxy)-
U078	75-35-4	Ethene, 1,1-dichloro-
U079	156-60-5	Ethene, 1,2-dichloro-, (E)-
U210	127-18-4	Ethene, tetrachloro-
U228	79-01-6	Ethene, trichloro-
U112	141-78-6	Ethyl acetate (I)
U113	140-88-5	Ethyl acrylate (I)
U238	51-79-6	Ethyl carbamate (urethane)
U117	60-29-7	Ethyl ether (I)
U114	[1]111-54-6	Ethylenebisdithiocarbamic acid, salts and esters
U067	106-93-4	Ethylene dibromide
U077	107-06-2	Ethylene dichloride
U359	110-80-5	Ethylene glycol monoethyl ether
U115	75-21-8	Ethylene oxide (I,T)
U116	96-45-7	Ethylenethiourea
U076	75-34-3	Ethylidene dichloride
U118	97-63-2	Ethyl methacrylate
U119	62-50-0	Ethyl methanesulfonate
U120	206-44-0	Fluoranthene
U122	50-00-0	Formaldehyde
U123	64-18-6	Formic acid (C,T)
U124	110-00-9	Furan (I)
U125	98-01-1	2-Furancarboxaldehyde (I)
U147	108-31-6	2,5-Furandione
U213	109-99-9	Furan, tetrahydro- (I)
U125	98-01-1	Furfural (I)
U124	110-00-9	Furfuran (I)
U206	18883-66-4	Glucopyranose, 2-deoxy-2(3-methyl-3-nitrosoureido)-, D-
U206	18883-66-4	D-Glucose, 2-deoxy-2-[[(methylnitrosoamino)-carbonyl]amino]-
U126	765-34-4	Glycidylaldehyde
U163	70-25-7	Guanidine, N-methyl-N'-nitro-N-nitroso-
U127	118-74-1	Hexachlorobenzene
U128	87-68-3	Hexachlorobutadiene
U130	77-47-4	Hexachlorocyclopentadiene
U131	67-72-1	Hexachloroethane
U132	70-30-4	Hexachlorophene
U243	1888-71-7	Hexachloropropene
U133	302-01-2	Hydrazine (R,T)

Hazardous Waste No.	Chemical Abstracts No.	Substance
U086	1615-80-1	Hydrazine, 1,2-diethyl-
U098	57-14-7	Hydrazine, 1,1-dimethyl-
U099	540-73-8	Hydrazine, 1,2-dimethyl-
U109	122-66-7	Hydrazine, 1,2-diphenyl-
U134	7664-39-3	Hydrofluoric acid (C,T)
U134	7664-39-3	Hydrogen fluoride (C,T)
U135	7783-06-4	Hydrogen sulfide
U135	7783-06-4	Hydrogen sulfide H_2S
U096	80-15-9	Hydroperoxide, 1-methyl-1-phenylethyl- (R)
U116	96-45-7	2-Imidazolidinethione
U137	193-39-5	Indeno[1,2,3-cd]pyrene
U190	85-44-9	1,3-Isobenzofurandione
U140	78-83-1	Isobutyl alcohol (I,T)
U141	120-58-1	Isosafrole
U142	143-50-0	Kepone
U143	303-34-4	Lasiocarpine
U144	301-04-2	Lead acetate
U146	1335-32-6	Lead, bis(acetato-O)tetrahydroxytri-
U145	7446-27-7	Lead phosphate
U146	1335-32-6	Lead subacetate
U129	58-89-9	Lindane
U163	70-25-7	MNNG
U147	108-31-6	Maleic anhydride
U148	123-33-1	Maleic hydrazide
U149	109-77-3	Malononitrile
U150	148-82-3	Melphalan
U151	7439-97-6	Mercury
U152	126-98-7	Methacrylonitrile (I,T)
U092	124-40-3	Methanamine, N-methyl- (I)
U029	74-83-3	Methane, bromo-
U045	74-87-3	Methane, chloro- (I,T)
U046	107-30-2	Methane, chloromethoxy-
U068	74-95-3	Methane, dibromo-
U080	75-09-2	Methane, dichloro-
U075	75-71-8	Methane, dichlorodifluoro-
U138	74-88-4	Methane, iodo-
U119	62-50-0	Methanesulfonic acid, ethyl ester
U211	56-23-5	Methane, tetrachloro-

Hazardous Waste No.	Chemical Abstracts No.	Substance
U153	74-93-1	Methanethiol (I,T)
U225	75-25-2	Methane, tribromo-
U044	67-66-3	Methane, trichloro-
U121	75-69-4	Methane, trichlorofluoro-
U036	57-74-9	4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-
U154	67-56-1	Methanol (I)
U155	91-80-5	Methapyrilene
U142	143-50-0	1,3,4-Metheno-2H-cyclobuta[cd]pentalen-2-one, 1,1a,3,3a,4,5,5,5a,5b,6-decachloroctahydro-
U247	72-43-5	Methoxychlor
U154	67-56-1	Methyl alcohol (I)
U029	74-83-9	Methyl bromide
U186	504-60-9	1-Methylbutadiene (I)
U045	74-87-3	Methyl chloride (I,T)
U156	79-22-1	Methyl chlorocarbonate (I,T)
U226	71-55-6	Methyl chloroform
U157	56-49-5	3-Methylcholanthrene
U158	101-14-4	4,4'-Methylenebis(2-chloroaniline)
U068	74-95-3	Methylene bromide
U080	75-09-2	Methylene chloride
U159	78-93-3	Methyl ethyl ketone (MEK) (I,T)
U160	1338-23-4	Methyl ethyl ketone peroxide (R,T)
U138	74-88-4	Methyl iodide
U161	108-10-1	Methyl isobutyl ketone (I)
U162	80-62-6	Methyl methacrylate (I,T)
U161	108-10-1	4-Methyl-2-pentanone (I)
U164	56-04-2	Methylthiouracil
U010	50-07-7	Mitomycin C
U059	20830-81-3	5,12-Naphthacenedione, 8-acetyl-10-[(3-amino-2,3,6-trideoxy)-alpha-L-lyxo-hexopyranosyl)oxy]-7,8,9,10-tetrahy 6,8,11-trihydroxy-1-methoxy-, (8S-cis)-
U167	134-32-7	1-Naphthalenamine
U168	91-59-8	2-Naphthalenamine
U026	494-03-1	Naphthalenamine, N,N'-bis(2-chloroethyl)-
U165	91-20-3	Naphthalene
U047	91-58-7	Naphthalene, 2-chloro-
U166	130-15-4	1,4-Naphthalenedione
U236	72-57-1	2,7-Naphthalenedisulfonic acid, 3,3'-[(3,3'-dimethyl[1,1'-biphenyl]-4,4'diyl)bis(azo)bis[5-amino-4-hydroxy]-, tetrasodium salt

Hazardous Waste No.	Chemical Abstracts No.	Substance
U279	63-25-2	1-Naphthalenol, methylcarbamate
U166	130-15-4	1,4-Naphthoquinone
U167	134-2-7	alpha-Naphthylamine
U168	91-59-8	beta-Naphthylamine
U217	10102-45-1	Nitric acid, thallium(1+) salt
U169	98-95-3	Nitrobenzene (I,T)
U170	100-02-7	p-Nitrophenol
U171	79-46-9	2-Nitropropane (I,T)
U172	924-16-3	N-Nitrosodi-n-butylamine
U173	1116-54-7	N-Nitrosodiethanolamine
U174	55-18-5	N-Nitrosodiethylamine
U176	759-73-9	N-Nitroso-N-ethylurea
U177	684-93-5	N-Nitroso-N-methylurea
U178	615-53-2	N-Nitroso-N-methylurethane
U179	100-75-4	N-Nitrosopiperidine
U180	930-55-2	N-Nitrosopyrrolidine
U181	99-55-8	5-Nitro-o-toluidine
U193	1120-71-4	1,2-Oxathiolane, 2,2-dioxide
U058	50-18-0	2H-1,3,2-Oxazaphosphorin-2-amine, N,N-bis(2-chloroethyl)tetrahydro-,2-oxide
U115	75-21-8	Oxirane (I,T)
U126	765-34-4	Oxiranecarboxyaldehyde
U041	106-89-8	Oxirane, (chloromethyl)-
U182	123-63-7	Paraldehyde
U183	608-93-5	Pentachlorobenzene
U184	76-01-7	Pentachloroethane
U185	82-68-8	Pentachloronitrobenzene (PCNB)
See F027	87-86-5	Pentachlorophenol
U161	108-10-1	Pentanol, 4-methyl-
U186	504-60-9	1,3-Pentadiene (I)
U187	62-44-2	Phenacetin
U188	108-95-2	Phenol
U048	95-57-8	Phenol, 2-chloro-
U039	59-50-7	Phenol, 4-chloro-3-methyl-
U081	120-83-2	Phenol, 2,4-dichloro-
U082	87-65-0	Phenol, 2,6-dichloro-
U089	56-53-1	Phenol, 4,4'-(1,2-diethyl-1,2-ethenediyl)bis-,(E)-
U101	105-67-9	Phenol, 2,4-dimethyl-
U052	1319-77-3	Phenol, methyl-

Hazardous Waste No.	Chemical Abstracts No.	Substance
U132	70-30-4	Phenol, 2,2'-methylenebis[3,4,6-trichloro-
U411	114-26-1	Phenol, 2-(1-methylethoxy)-, methylcarbamate
U170	100-02-7	Phenol, 4-nitro-
See F027	87-86-5	Phenol, pentachloro-
See F027	58-90-2	Phenol, 2,3,4,6-tetrachloro-
See F027	95-95-4	Phenol, 2,4,5-trichloro-
See F027	88-06-2	Phenol, 2,4,6-trichloro-
U150	148-82-3	L-Phenylalanine, 4-[bis(2-chloroethyl)amino]-
U145	7446-27-7	Phosphoric acid, lead(2+) salt (2:3)
U087	3288-58-2	Phosphorodithioic acid, 0,0-diethyl S-methyl ester
U189	1314-80-3	Phosphorus sulfide (R)
U190	85-44-9	Phthalic anhydride
U191	109-06-8	2-Picoline
U179	100-75-4	Piperidine, 1-nitroso-
U192	23950-58-5	Pronamide
U194	107-10-8	1-Propanamine (I,T)
U111	621-64-7	1-Propanamine, N-nitroso-N-propyl-
U110	142-84-7	1-Propanamine, N-propyl- (I)
U066	96-12-8	Propane, 1,2-dibromo-3-chloro-
U083	78-87-5	Propane, 1,2-dichloro-
U149	109-77-3	Propanedinitrile
U171	79-46-9	Propane, 2-nitro- (I,T)
U027	108-60-1	Propane, 2,2'-oxybis[2-chloro-
U193	1120-71-4	1,3-Propane sultone
See F027	93-72-1	Propanoic acid, 2-(2,4,5-trichlorophenoxy)-
U235	126-72-7	1-Propanol, 2,3-dibromo-, phosphate (3:1)
U140	78-83-1	1-Propanol, 2-methyl- (I,T)
U002	67-64-1	2-Propanone (I)
U007	79-06-1	2-Propenamide
U084	542-75-6	1-Propene, 1,3-dichloro-
U243	1888-71-7	1-Propene, 1,1,2,3,3,3-hexachloro-
U009	107-13-1	2-Propenenitrile
U152	126-98-7	2-Propenenitrile, 2-methyl- (I,T)
U008	79-10-7	2-Propenoic acid (I)
U113	140-88-5	2-Propenoic acid, ethyl ester (I)
U118	97-63-2	2-Propenoic acid, 2-methyl-, ethyl ester
U162	80-62-6	2-Propenoic acid, 2-methyl-, methyl ester (I,T)
U373	122-42-9	Propham

Hazardous Waste No.	Chemical Abstracts No.	Substance
U411	114-26-1	Propoxur
U194	107-10-8	n-Propylamine (I,T)
U083	78-87-5	Propylene dichloride
U387	52888-80-9	Prosulfocarb
U148	123-33-1	3,6-Pyridazinedione, 1,2-dihydro-
U196	110-86-1	Pyridine
U191	109-06-8	Pyridine, 2-methyl-
U237	66-75-1	2,4(1H,3H)-Pyrimidinedione, 5-[bis(2-chloroethyl)amino]-
U164	56-04-2	4-(1H)-Pyrimidinone, 2,3-dihydro-6-methyl-2-thioxo-
U180	930-55-2	Pyrrolidine, 1-nitroso-
U200	50-55-5	Reserpine
U201	108-46-3	Resorcinol
U202	[1]81-07-2	Saccharin, and salts
U203	94-59-7	Safrole
U204	7783-00-8	Selenious acid
U204	7783-00-8	Selenium dioxide
U205	7488-56-4	Selenium sulfide
U205	7488-56-4	Selenium sulfide SeS_2 (R,T)
U015	115-02-6	L-Serine, diazoacetate (ester)
See F027	93-72-1	Silvex (2,4,5-TP)
U206	18883-66-4	Streptozotocin
U103	77-78-1	Sulfuric acid, dimethyl ester
U189	1314-80-3	Sulfur phosphide (R)
See F027	93-76-5	2,4,5-T
U207	95-94-3	1,2,4,5-Tetrachlorobenzene
U208	630-20-6	1,1,1,2-Tetrachloroethane
U209	79-34-5	1,1,2,2-Tetrachloroethane
U210	127-18-4	Tetrachloroethylene
See F027	58-90-2	2,3,4,6-Tetrachlorophenol
U213	109-99-9	Tetrahydrofuran (I)
U214	563-68-8	Thallium(I) acetate
U215	6533-73-9	Thallium(I) carbonate
U216	7791-12-0	Thallium(I) chloride
U216	7791-12-0	Thallium chloride TlCl
U217	10102-45-1	Thallium(I) nitrate
U218	62-55-5	Thioacetamide
U410	59669-26-0	Thiodicarb
U153	74-93-1	Thiomethanol (I,T)

Hazardous Waste No.	Chemical Abstracts No.	Substance
U244	137-26-8	Thioperoxydicarbonic diamide $[(H_2N)C(S)]_2S_2$, tetramethyl-
U409	23564-05-8	Thiophanate-methyl
U219	62-56-6	Thiourea
U244	137-26-8	Thiram
U220	108-88-3	Toluene
U221	25376-45-8	Toluenediamine
U223	26471-62-5	Toluene diisocyanate (R,T)
U328	95-53-4	o-Toluidine
U353	106-49-0	p-Toluidine
U222	636-21-5	o-Toluidine hydrochloride
U389	2303-17-5	Triallate
U011	61-82-5	1H-1,2,4-Triazol-3-amine
U408	118-79-6	2,4,6-Tribromophenol
U227	79-00-5	1,1,2-Trichloroethane
U228	79-01-6	Trichloroethylene
U121	75-69-4	Trichloromonofluoromethane
See F027	95-95-4	2,4,5-Trichlorophenol
See F027	88-06-2	2,4,6-Trichlorophenol
U404	121-44-8	Triethylamine
U234	99-35-4	1,3,5-Trinitrobenzene (R,T)
U182	123-63-7	1,3,5-Trioxane, 2,4,6-trimethyl-
U235	126-72-7	Tris (2,3-dibromopropyl) phosphate
U236	72-57-1	Trypan blue
U237	66-75-1	Uracil mustard
U176	759-73-9	Urea, N-ethyl-N-nitroso-
U177	684-93-5	Urea, N-methyl-N-nitroso-
U043	75-01-4	Vinyl chloride
U248	[1]81-81-2	Warfarin, and salts, when present at concentrations of 0.3% or less
U239	1330-20-7	Xylene (I)
U200	50-55-5	Yohimban-16-carboxylic acid, 11,17-dimethoxy-18-[(3,4,5-trimethoxybenzoyl)oxy]-,methyl ester, (3beta,16beta,17alpha,18beta,20alpha)-
U249	1314-84-7	Zinc phosphide Zn_3P_2, when present at concentrations of 10% or less

[1]CAS number given for parent compound only.

History: Effective January 1, 1984; amended effective October 1, 1986; December 1, 1988; January 1, 1994; July 1, 1997; December 1, 2003.
General Authority: NDCC 23-20.3-03
Law Implemented: NDCC 23-20.3-03, 23-20.3-04

33-24-02-19. Deletion of certain hazardous waste codes following equipment cleaning and replacement.

1. Wastes from wood preserving processes at plants that do not resume or initiate use of chlorophenolic preservatives will not meet the listing definition of F032 once the generator has met all the requirements of subsections 2 and 3. These wastes may, however, continue to meet another hazardous waste listing description or may exhibit one or more of the hazardous waste characteristics.

2. Generators must either clean or replace all process equipment that may have come into contact with chlorophenolic formulations or constituents thereof, including, but not limited to, treatment cylinders, sumps, tanks, piping systems, drip pads, forklifts, and trams, in a manner that minimizes or eliminates the escape of hazardous waste or constituents, leachate, contaminated drippage, or hazardous waste decomposition products to the ground water, surface water, or atmosphere.

   a. Generators shall do one of the following:

      (1) Prepare and follow an equipment cleaning plan and clean equipment in accordance with this section;

      (2) Prepare and follow an equipment replacement plan and replace equipment in accordance with this section; or

      (3) Document cleaning and replacement in accordance with this section, carried out after termination of use of chlorophenolic preservatives.

   b. Cleaning requirements.

      (1) Prepare and sign a written equipment cleaning plan that describes:

         (a) The equipment to be cleaned;

         (b) How the equipment will be cleaned;

         (c) The solvent to be used in cleaning;

         (d) How solvent rinses will be tested; and

         (e) How cleaning residues will be disposed.

      (2) Equipment must be cleaned as follows:

         (a) Remove all visible residues from process equipment;

(b) Rinse process equipment with an appropriate solvent until dioxins and dibenzofurans are not detected in the final solvent rinse.

(3) Analytical requirements.

(a) Rinses must be tested in accordance with environmental protection agency publication SW-846, as incorporated by reference in section 33-24-01-05, method 8290.

(b) "Not detected" means at or below the lower method calibration limit (MCL) in method 8290, table 1.

(4) The generator must manage all residues from the cleaning process as F032 waste.

c. Replacement requirements.

(1) Prepare and sign a written equipment replacement plan that describes:

(a) The equipment to be replaced;

(b) How the equipment will be replaced; and

(c) How the equipment will be disposed.

(2) The generator must manage the discarded equipment as F032 waste.

d. Documentation requirements.

(1) Document that previous equipment cleaning or replacement, or both, was performed in accordance with this section and occurred after cessation of use of chlorophenolic preservatives.

(2) [Reserved]

3. The generator must maintain the following records documenting the cleaning and replacement as part of the facility's operating record:

a. The name and address of the facility;

b. Formulations previously used and the date on which their use ceased in each process at the plant;

c. Formulations currently used in each process at the plant;

d. The equipment cleaning or replacement plan;

e. The name and address of any persons who conducted the cleaning and replacement;

f. The dates on which cleaning and replacement were accomplished;

g. The dates of sampling and testing;

h. A description of the sample handling and preparation techniques, including techniques used for extraction, containerization, preservation, and chain-of-custody of the samples;

i. A description of the tests performed, the date the tests were performed, and the results of the tests;

j. The name and model numbers of the instruments used in performing the tests;

k. QA/QC documentation; and

l. The following statement signed by the generator or the generator's authorized representative: I certify under penalty of law that all process equipment required to be cleaned or replaced under section 33-24-02-19 was cleaned or replaced as represented in the equipment cleaning and replacement plan and accompanying documentation. I am aware that there are significant penalties for providing false information, including the possibility of fine or imprisonment.

History: Effective January 1, 1994; amended effective December 1, 2003.
General Authority: NDCC 23-20.3-03
Law Implemented: NDCC 23-20.3-03, 23-20.4-04

33-24-02-20. [Reserved]

33-24-02-21. [Reserved]

33-24-02-22. Comparable/syngas fuel exclusion. Wastes that meet the following comparable/syngas fuel requirements are not solid wastes:

1. **Comparable fuel specifications.**

a. Physical specifications.

(1) Heating value. The heating value must exceed five thousand British thermal units per pound (eleven thousand five hundred Joules per gram).

(2) Viscosity. The viscosity must not exceed fifty centistokes, as fired.

b. Constituent specifications. For compounds listed in table 1, the specification levels and, when nondetect is the specification, minimum required detection limits are shown in table 1.

Table 1: Detection and Detection Limit Values for Comparable Fuel Specification

Chemical Name	CAS No.	Composite Value (mg/kg)	Heating Value (BTU/lb)	Concentration Limit (mg/kg at 10,000 BTU/lb)	Minimum Required Detection Limit (mg/kg)
Total Nitrogen as N	NA	9,000	18,400	4,900	.....
Total Halogens as Cl	NA	1,000	18,400	540	.....
Total Organic Halogens as Cl	NA	.....	.....	([1])	.....
Polychlorinated biphenyls, total [Aroclors, total]	1336-36-3	ND	.....	ND	1.4
Cyanide, total	57-12-5	ND	.....	ND	1.0
Metals:					
Antimony, total	7440-36-0	ND	.....	12	.....
Arsenic, total	7440-38-2	ND	,,,,,	0.23	.....
Barium, total	7440-39-3	ND	,,,,,	23	,,,,,
Beryllium, total	7440-41-7	ND	.....	1.2	.....
Cadmium, total	7440-43-9	.....	ND	.....	1.2
Chromium, total	7440-47-3	ND	.....	2.3	.....
Cobalt	7440-48-4	ND	.....	4.6	.....
Lead, total	7439-92-1	57	18,100	31	.....
Manganese	7439-96-5	ND	.....	1.2	.....
Mercury, total	7439-97-6	ND	.....	0.25	.....
Nickel, total	7440-02-0	106	18,400	58	.....
Selenium, total	7782-49-2	ND	.....	0.23	.....
Silver, total	7440-22-4	ND	.....	2.3	.....
Thallium, total	7440-28-0	ND	.....	23	.....
Hydrocarbons:					
Benzo[a]anthracene	56-55-3	ND	.....	2,400	.....
Benzene	71-43-2	8,000	19,600	4,100	.....
Benzo[b]fluoranthene	205-99-2	ND	.....	2,400	.....
Benzo[k]fluoranthene	207-08-9	ND	.....	2,400	.....
Benzo[a]pyrene	50-32-8	ND	.....	2,400	.....
Chrysene	218-01-9	ND	.....	2,400	.....
Dibenzo[a,h]anthracene	53-70-3	ND	.....	2,400	.....
7,12-Dimethylbenz[a] anthracene	57-97-6	ND	.....	2,400	.....
Fluoanthene	206-44-0	ND	.....	2,400	.....
Indeno (1,2,3-cd)pyrene	193-39-5	ND	.....	2,400	.....

Table 1: Detection and Detection Limit Values for Comparable Fuel Specification					
Chemical Name	**CAS No.**	**Composite Value (mg/kg)**	**Heating Value (BTU/lb)**	**Concentration Limit (mg/kg at 10,000 BTU/lb)**	**Minimum Required Detection Limit (mg/kg)**
3-Methylcholanthrene	56-49-5	ND	.....	2,400	.....
Naphthalene	91-20-3	6,200	19,400	3,200	.....
Toluene	108-88-3	69,000	19,400	36,000	.....
Oxygenates:					
Acetophenone	98-86-2	ND	.....	2,400	.....
Acrolein	107-02-8	ND	.....	39	.....
Allyl alcohol	107-18-6	ND	.....	30	.....
Bis(2-ethylhexyl)phthalate [Di-2-ethylhexylphthalate]	117-81-7	ND	.....	2,400	.....
Butyl benzyl phthalate	85-68-7	ND	.....	2,400	.....
o-Cresol [2-Methyl phenol]	95-48-7	ND	.....	2,400	.....
m-Cresol [3-Methyl phenol]	108-39-4	ND	.....	2,400	.....
p-Cresol [4-Methyl phenol]	106-44-5	ND	.....	2,400	.....
Di-n-butyl phthalate	84-74-2	ND	.....	2,400	.....
Diethyl phthalate	84-66-2	ND	.....	2,400	.....
2,4-Dimethylphenol	105-67-9	ND	.....	2,400	.....
Dimethyl phthalate	131-11-3	ND	.....	2,400	.....
Di-n-octyl phthalate	117-84-0	ND	.....	2,400	.....
Endothall	145-73-3	ND	.....	100	.....
Ethyl methacrylate	97-63-2	ND	.....	39	.....
2-Ethoxyethanol [Ethylene glycol monoethyl ether]	110-80-5	ND	.....	100	.....
Isobutyl alcohol	78-83-1	ND	.....	39	.....
Isofarole	120-58-1	ND	.....	2,400	.....
Methyl ethyl ketone [2-Butanone]	78-93-3	ND	.....	39	.....
Methyl methacrylate	80-62-6	ND	.....	39	.....
1,4-Naphthoquinone	130-15-4	ND	.....	2,400	.....
Phenol	108-95-2	ND	.....	2,400	.....
Propargyl alcohol [2-Propyn-1-ol]	107-19-7	ND	.....	30	.....
Safrole	94-59-7	ND	.....	2,400	.....
Sulfonated Organics:					
Carbon disulfide	75-15-0	ND	.....	ND	39
Disulfoton	298-04-4	ND	.....	ND	2,400
Ethyl methanesulfonate	62-50-0	ND	.....	ND	2,400
Methyl methanesulfonate	66-27-3	ND	.....	ND	2,400
Phorate	298-02-2	ND	.....	ND	2,400
1,3-Propane sultone	1120-71-4	ND	.....	ND	100

Table 1: Detection and Detection Limit Values for Comparable Fuel Specification					
Chemical Name	**CAS No.**	**Composite Value (mg/kg)**	**Heating Value (BTU/lb)**	**Concentration Limit (mg/kg at 10,000 BTU/lb)**	**Minimum Required Detection Limit (mg/kg)**
Tetraethyldithiopyro phosphate [Sulfotepp]	3689-24-5	ND	.....	ND	2,400
Thiophenol [Benzenethiol]	108-98-5	ND	.....	ND	30
O,O,O-Triethyl phosphorthioate	126-68-1	ND	.....	ND	2,400
Nitrogenated Organics:					
Acetonitrile [Methyl cyanide]	75-05-8	ND	.....	ND	39
2-Acetylaminofluorene [2-AAF]	53-96-3	ND	.....	ND	2,400
Acrylonitrile	107-13-1	ND	.....	ND	39
4-Aminobiphenyl	92-67-1	ND	.....	ND	2,400
4-Aminopyridine	504-24-5	ND	.....	ND	100
Aniline	62-53-3	ND	.....	ND	2,400
Benzidine	92-87-5	ND	.....	ND	2,400
Dibenz[a,j]acridine	224-42-0	ND	.....	ND	2,400
O,O-Diethyl O-pyrazinyl phosphorothioate[Thionazin]	297-97-2	ND	.....	ND	2,400
Dimethoate	60-51-5	ND	.....	ND	2,400
P-(Dimethylamino) azobenzene [4-Dimethylaminoazo benzene]	60-11-7	ND	.....	ND	2,400
3,3'-Dimethylbenzidine	119-93-7	ND	.....	ND	2,400
a,a-Dimethylphenethylamine	122-09-8	ND	.....	ND	2,400
3,3'-Dimenthoxybenzidine	119-90-4	ND	.....	ND	100
1,3-Dinitrobenzene [m-Dinitrobenzene]	99-65-0	ND	.....	ND	2,400
4,6-Dinitro-o-cresol	534-52-1	ND	.....	ND	2,400
2,4-Dintirophenol	51-28-5	ND	.....	ND	2,400
2,4-Dinitrotoluene	121-14-2	ND	.....	ND	2,400
2,6-Dinitrotoluene	606-20-2	ND	.....	ND	2,400
Dinoseb [2-sec-Butyl-4,6-dinitro phenol]	88-85-7	ND	.....	ND	2,400
Diphenylamine	122-39-4	ND	.....	ND	2,400
Ethyl carbamate [Urethane]	51-79-6	ND	.....	ND	100
Ethylenethiourea [2-Imidazolidinethione]	96-45-7	ND	.....	ND	110
Famphur	52-85-7	ND	.....	ND	2,400
Methacrylonitrile	126-98-7	ND	.....	ND	39
Methapyrilene	91-80-5	ND	.....	ND	2,400
Methomyl	16752-77-5	ND	.....	ND	57

Table 1: Detection and Detection Limit Values for Comparable Fuel Specification					
Chemical Name	**CAS No.**	**Composite Value (mg/kg)**	**Heating Value (BTU/lb)**	**Concentration Limit (mg/kg at 10,000 BTU/lb)**	**Minimum Required Detection Limit (mg/kg)**
2-Methylactonitrile, [Acetone, cyanohydrin]	75-86-5	ND	.....	ND	100
Methyl parathion	298-00-0	ND	.....	ND	2,400
MNNG [N-Methyl-N-nitroso-N'-nitroguanidine]	70-25-7	ND	.....	ND	110
1-Naphthylamine, [a-Naphthylamine]	134-32-7	ND	.....	ND	2,400
2-Naphthylamine [b-Naphthylamine]	91-59-8	ND	.....	ND	2,400
Nicotine	54-11-5	ND	.....	ND	100
4-Nitroaniline, [p-Nitroaniline]	100-01-6	ND	.....	ND	2,400
Nitrobenzene	98-95-3	ND	.....	ND	2,400
p-Nitrophenol, [p-Nitrophenol]	100-02-7	ND	.....	ND	2,400
5-nitro-o-toluidine	99-55-8	ND	.....	ND	2,400
N-Nitrosodi-n-butylamine	924-16-3	ND	.....	ND	2,400
N-Nitrosodiethylamine	55-18-5	ND	.....	ND	2,400
N-Nitrosodiphenylamine, [Diphenylnitrosamine]	86-30-6	ND	.....	ND	2,400
N-Nitroso-N-methyl ethylamine	10595-95-6	ND	.....	ND	2,400
N-Nitrososmorpholine	59-89-2	ND	.....	ND	2,400
N-Nitrosopiperidine	100-75-4	ND	.....	ND	2,400
N-Nitrosopyrrolidine	930-55-2	ND	.....	ND	2,400
2-Nitropropane	79-46-9	ND	.....	ND	30
Parathion	56-38-2	ND	.....	ND	2,400
Phenacetin	62-44-2	ND	.....	ND	2,400
1,4-Phenylene diamine, [p-Phenylenediamine]	106-50-3	ND	.....	ND	2,400
N-Phenylthiourea	103-85-5	ND	.....	ND	57
2-Picoline [alpha-Picoline]	109-06-8	ND	.....	ND	2,400
Propylthiouracil, [6-Propyl-2-thiouracil]	51-52-5	ND	.....	ND	100
Pyradine	110-86-1	ND	.....	ND	2,400
Strychnine	57-24-9	ND	.....	ND	100
Thioacetamide	62-55-5	ND	.....	ND	57
Thiofanox	39196-18-4	ND	.....	ND	100
Thiourea	62-56-6	ND	.....	ND	57
Toluene-2,4-diamine [2,4-Diaminotoluene]	95-80-7	ND	.....	ND	57
Toluene-2,6-diamine [2,6-Diaminotoluene]	823-40-5	ND	.....	ND	57

Table 1: Detection and Detection Limit Values for Comparable Fuel Specification					
Chemical Name	**CAS No.**	**Composite Value (mg/kg)**	**Heating Value (BTU/lb)**	**Concentration Limit (mg/kg at 10,000 BTU/lb)**	**Minimum Required Detection Limit (mg/kg)**
o-Toluidine	95-53-4	ND	.....	ND	2,400
p-Toluidine	106-49-0	ND	.....	ND	100
1,3,5-Trinitrobenzene, [sym-Trinitrobenzene]	99-35-4	ND	.....	ND	2,400
Halogenated Organics:					
Allyl chloride	107-05-1	ND	.....	ND	39
Aramite	140-57-8	ND	.....	ND	2,400
Benzal chloride [Dichloromethyl benzene]	98-87-3	ND	.....	ND	100
Benzyl chloride	100-44-7	ND	.....	ND	100
bis(2-Chloroethyl)ether [Dichloroethyl ether]	111-44-4	ND	.....	ND	2,400
Bromoform [Tribromomethane]	75-25-2	ND	.....	ND	39
Bromomethane [Methyl bromide]	74-83-9	ND	.....	ND	39
4-Bromophenyl phenyl ether [p-Bromo diphenyl ether]	101-55-3	ND	.....	ND	2,400
Carbon tetrachloride	56-23-5	ND	.....	ND	39
Chlordane	57-74-9	ND	.....	ND	14
p-Chloroaniline	106-47-8	ND	.....	ND	2,400
Chlorobenzene	108-90-7	ND	.....	ND	39
Chlorobenzilate	510-15-6	ND	.....	ND	2,400
p-Chloro-m-cresol	59-50-7	ND	.....	ND	2,400
2-Chloroethyl vinyl ether	110-75-8	ND	.....	ND	39
Chloroform	67-66-3	ND	.....	ND	39
Chloromethane [Methyl chloride]	74-87-3	ND	.....	ND	39
2-Chloronaphthalene [beta-Chloronaphthalene]	91-58-7	ND	.....	ND	2,400
2-Chlorophenol [o-Chlorophenol]	95-57-8	ND	.....	ND	2,400
Chloroprene [2-Chloro-1,3-butadiene]	1126-99-8	ND	.....	ND	39
2,4-D [2,4-Dichlorophenoxy acetic acid]	94-75-7	ND	.....	ND	7.0
Diallate	2303-16-4	ND	.....	ND	2,400
1-2-Dibromo-3-chloropropane	96-12-8	ND	.....	ND	39
1,2-Dichlorobenzene [o-Dichlorobenzene]	95-50-1	ND	.....	ND	2,400
1,3-Dichlorobenzene [m-Dichlorobenzene]	541-73-1	ND	.....	ND	2,400

Table 1: Detection and Detection Limit Values for Comparable Fuel Specification					
Chemical Name	**CAS No.**	**Composite Value (mg/kg)**	**Heating Value (BTU/lb)**	**Concentration Limit (mg/kg at 10,000 BTU/lb)**	**Minimum Required Detection Limit (mg/kg)**
1,4-Dichlorobenzene [p-Dichlorobenzene]	106-46-7	ND	.....	ND	2,400
3,3'-Dichlorobenzidine	91-94-1	ND	.....	ND	2,400
Dichlorodifluoromethane [CFC-12]	75-71-8	ND	.....	ND	39
1,2-Dichloroethane [Ethylene dichloride]	107-06-2			ND	39
1,1-Dichloroethylene [Vinylidene chloride]	75-35-4	ND	.....	ND	39
Dichloromethoxy ethane [Bis(2-chloroethoxy)methane]	111-91-1	ND	.....	ND	2,400
2,4-Dicholorphenol	120-83-2	ND	.....	ND	2,400
2,6-Dichlorophenol	87-65-0	ND	.....	ND	2,400
1,2-Dichloropropane [Propylene dichloride]	78-87-5	ND	.....	ND	39
cis-1,3-Dichloropropylene	10061-01-5	ND	.....	ND	39
trans-1,3-Dichloropropylene	10061-02-6	ND	.....	ND	39
1,3-Dichloro-2-propanol	96-23-1	ND	.....	ND	30
Endosulfan I	959-98-8	ND	.....	ND	1.4
Endosulfan II	33213-65-9	ND	.....	ND	1.4
Endrin	72-20-8	ND	.....	ND	1.4
Endrin aldehyde	7421-93-4	ND	.....	ND	1.4
Endrin ketone	53494-70-5	ND	.....	ND	1.4
Epichlorohydrin [1-Chloro-2,3-epoxy propane]	106-89-8	ND	.....	ND	30
Ethylidene dichloride [1,1-Dichloroethane]	75-34-3	ND	.....	ND	39
2-Fluoroacetamide	640-19-7	ND	.....	ND	100
Heptachlor	76-44-8	ND	.....	ND	1.4
Heptachlor epoxide	1024-57-3	ND	.....	ND	2.8
Hexachlorobenzene	118-74-1	ND	.....	ND	2,400
Hexachloro-1,3-butadiene [Hexachlorobutadiene]	87-68-3	ND	.....	ND	2,400
Hexachlorocyclopentadiene	77-47-4	ND	.....	ND	2,400
Hexachloroethane	67-72-1	ND	.....	ND	2,400
Hexachloroprophene	70-30-4	ND	.....	ND	59,000
Hexachloropropene [Hexachloropropylene]	1888-71-7	ND	.....	ND	2,400
Isodrin	465-73-6	ND	.....	ND	2,400
Kepone [Chlordecane]	143-50-0	ND	.....	ND	4,700
Lindane [gamma-BHC][gamma-Hexachlorocyclohexane]	58-89-9	ND	.....	ND	1.4

Table 1: Detection and Detection Limit Values for Comparable Fuel Specification					
Chemical Name	**CAS No.**	**Composite Value (mg/kg)**	**Heating Value (BTU/lb)**	**Concentration Limit (mg/kg at 10,000 BTU/lb)**	**Minimum Required Detection Limit (mg/kg)**
Methylene chloride [Dichloromethane]	75-09-2	ND	.....	ND	39
4,4'-Methylene-bis(2-chloro aniline)	101-14-4	ND	.....	ND	100
Methyl iodide [Iodomethane]	74-88-4	ND	.....	ND	39
Pentachlorobenzene	608-93-5	ND	.....	ND	2,400
Pentachloroethane	76-01-7	ND	.....	ND	39
Pentachloronitrobenzene [PCNB][Quintobenzene] [Quintozene]	82-68-8	ND	.....	ND	2,400
Pentachlorophenol	87-86-5	ND	.....	ND	2,400
Pronamide	23950-58-5	ND	.....	ND	2,400
Silvex [2,4,5-Trichlorophenoxy propionic acid]	93-72-1	ND	.....	ND	7.0
2,3,7,8-Tetrachlorodibenzo-p-dioxin [2,3,7,8-TCDD]	1746-01-6	ND	.....	ND	30
1,2,4,5-Tetrachlorobenzene	95-94-3	ND	.....	ND	2,400
1,1,2,2-Tetrachloroethane	79-34-5	ND	.....	ND	39
Tetrachloroethylene [Perchloroethylene]	127-18-4	ND	.....	ND	39
2,3,4,6-Tetrachlorophenol	58-90-2	ND	.....	ND	2,400
1,2,4-Trichlorobenzene	120-82-1	ND	.....	ND	2,400
1,1,1-Trichloroethane [Methyl chloroform]	71-55-6	ND	.....	ND	39
1,1,2-Trichloroethane [Vinyl trichloride]	79-00-5	ND	.....	ND	39
Trichloroethylene	79-01-6	ND	.....	ND	39
Trichlorofluoromethane [Trichloromonofluoromethane]	75-69-4	ND	.....	ND	39
2,4,5-Trichlorophenol	95-95-4	ND	.....	ND	2,400
2,4,6-Trichlorophenol	88-06-2	ND	.....	ND	2400
1,2,3-Trichloropropane	96-18-4	ND	.....	ND	39
Vinyl chloride	75-01-4	ND	.....	ND	39

Notes:

NA - Not applicable.

ND - Nondetect.

[1] - 25 or individual halogenated organics listed below.

2. **Synthesis gas fuel specification.** Synthesis gas fuel (for example, syngas fuel) that is generated from hazardous waste must:

   a. Have a minimum British thermal unit value of one hundred British thermal units/standard cubic foot;

   b. Contain less than one part per million volume of total halogen;

   c. Contain less than three hundred parts per million volume of total nitrogen other than diatomic nitrogen (N_2);

   d. Contain less than two hundred parts per million volume of hydrogen sulfide; and

   e. Contain less than one part per million volume of each hazardous constituent in the target list of chapter 33-24-02, appendix V constituents.

3. **Implementation.** Waste that meets the comparable or syngas fuel specifications provided by subsections 1 and 2 (these constituent levels must be achieved by the comparable fuel when generated, or as a result of treatment or blending, as provided in subdivision c or d) is excluded from the definition of solid waste provided that the following requirements are met:

   a. Notices. For purposes of section 33-24-02-22, the person claiming and qualifying for the exclusion is called the comparable/syngas fuel generator and the person burning the comparable/syngas fuel is called the comparable/syngas burner. The person who generates the comparable fuel or syngas fuel must claim and certify to the exclusion.

      (1) Regulatory notice.

         (a) The generator must submit a one-time notice to the department, in whose jurisdiction the exclusion is being claimed and where the comparable/syngas fuel will be burned, certifying compliance with the conditions of the exclusion and providing documentation as required by subparagraph c;

         (b) If the generator is a company that generates comparable/syngas fuel at more than one facility, the generator shall specify at which sites the comparable/syngas fuel will be generated; and

         (c) A comparable/syngas fuel generator's notification to the department must contain the following items:

[1] The name, address, and identification number of the person or facility claiming the exclusion;

[2] The applicable hazardous waste codes for the hazardous waste;

[3] Name and address of the units, meeting the requirements of subdivision b, that will burn the comparable/syngas fuel; and

[4] The following statement is signed and submitted by the person claiming the exclusion or that person's authorized representative:

Under penalty of criminal and civil prosecution for making or submitting false statements, representations, or omissions, I certify that the requirements of section 33-24-02-22 have been met for all waste identified in this notification. Copies of the records and information required at subdivision j of subsection 3 of section 33-24-02-22 are available at the comparable/syngas fuel generator's facility. Based on my inquiry of the individuals immediately responsible for obtaining the information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

(2) Public notice. Prior to burning an excluded comparable/syngas fuel, the burner must publish in a major newspaper of general circulation local to the site where the fuel will be burned, a notice entitled "Notification of Burning a Comparable/Syngas Fuel Excluded Under the Resource Conservation and Recovery Act" containing the following information:

(a) Name, address, and identification number of the generating facility;

(b) Name and address of the unit or units that will burn the comparable/syngas fuel;

(c) A brief, general description of the manufacturing, treatment, or other process generating the comparable/syngas fuel;

(d) An estimate of the average and maximum monthly and annual quantity of the waste claimed to be excluded; and

(e) Name and mailing address of the department to which the claim was submitted.

b. Burning. The comparable/syngas fuel exclusion for fuels meeting the requirements of subsection 1 or 2 and subdivision a applies only if the fuel is burned in the following units that also shall be subject to any combination of federal, state, and local air emission requirements, including all applicable Clean Air Act maximum achievable control technology requirements:

(1) Industrial furnaces as defined in section 33-24-01-04.

(2) Boilers, as defined in section 33-24-01-04, that are further defined as follows:

(a) Industrial boilers located on the site of a facility engaged in a manufacturing process where substances are transformed into new products, including the component parts of products, by mechanical or chemical processes; or

(b) Utility boilers used to produce electric power, steam, heated or cooled air, or other gases or fluids for sale.

(3) Hazardous waste incinerators subject to regulation under sections 33-24-05-144 through 33-24-05-159 or applicable Clean Air Act maximum achievable control technology standards.

(4) Gas turbines used to produce electric power, steam, heated or cooled air, or other gases or fluids for sale.

c. Blending to meet the viscosity specification. A hazardous waste blended to meet the viscosity specification shall:

(1) As generated and prior to any blending, manipulation, or processing meet the constituent and heating value specifications of paragraph 1 of subdivision a of subsection 1 and subdivision b of subsection 1;

(2) Be blended at a facility that is subject to the applicable requirements of sections 33-24-05-01 through 33-24-05-190, 33-24-05-300 through 33-24-05-524, and 33-24-05-800 through 33-24-05-819, and the applicable requirements of

subsection 5 of section 33-24-06-16, or section 33-24-03-12; and

(3) Not violate the dilution prohibition of subdivision f.

d. Treatment to meet the comparable fuel exclusion specifications.

(1) A hazardous waste may be treated to meet the exclusion specifications of subdivisions a and b of subsection 1 provided the treatment:

(a) Destroys or removes the constituent listed in the specification or raises the heating value by removing or destroying hazardous constituents or materials;

(b) Is performed at a facility that is subject to the applicable requirements of sections 33-24-05-01 through 33-24-05-190, 33-24-05-300 through 33-24-05-524, and 33-24-05-800 through 33-24-05-819, and the applicable requirements of subsection 5 of section 33-24-06-16, or section 33-24-03-12; and

(c) Does not violate the dilution prohibition of subdivision f.

(2) Residuals resulting from the treatment of a hazardous waste listed in sections 33-24-02-15 through 33-24-02-19 to generate a comparable fuel remain a hazardous waste.

e. Generation of a syngas fuel.

(1) A syngas fuel can be generated from the processing of hazardous wastes to meet the exclusion specifications of subsection 2 provided the processing:

(a) Destroys or removes the constituent listed in the specification or raises the heating value by removing or destroying constituents or materials;

(b) Is performed at a facility that is subject to the applicable requirements of sections 33-24-05-01 through 33-24-05-190, 33-24-05-300 through 33-24-05-524, and 33-24-05-800 through 33-24-05-819, and the applicable requirements of subsection 5 of section 33-24-06-16; or section 33-24-03-12, or is an exempt recycling unit pursuant to subsection 3 of section 33-24-02-06; and

(c) Does not violate the dilution prohibition of subdivision f.

(2) Residuals resulting from the treatment of a hazardous waste listed in sections 33-24-02-15 through 33-24-02-19 to generate a syngas fuel remain a hazardous waste.

f. Dilution prohibition for comparable and syngas fuels. No generator, transporter, handler, or owner or operator of a treatment, storage, or disposal facility shall in any way dilute a hazardous waste to meet the exclusion specifications of paragraph 1 of subdivision a of subsection 1 or subdivision b of subsection 1 or subsection 2.

g. Waste analysis plans. The generator of a comparable/syngas fuel shall develop and follow a written waste analysis plan which describes the procedures for sampling and analysis of the hazardous waste to be excluded. The waste analysis plan shall be developed in accordance with the applicable sections of the "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods" (SW 846). The plan shall be followed and retained at the facility excluding the waste.

(1) At a minimum, the plan must specify:

(a) The parameters for which each hazardous waste will be analyzed and the rationale for the selection of those parameters;

(b) The test methods which will be used to test for these parameters;

(c) The sampling method which will be used to obtain a representative sample of the waste to be analyzed;

(d) The frequency with which the initial analysis of the waste will be reviewed or repeated to ensure that the analysis is accurate and up to date; and

(e) If process knowledge is used in the waste determination, any information prepared by the generator in making such determination.

(2) The waste analysis plan shall also contain records of the following:

(a) The dates and times waste samples were obtained, and the dates the samples were analyzed;

(b) The names and qualifications of the person or persons who obtained the samples;

(c) A description of the temporal and spatial locations of the samples;

(d) The name and address of the laboratory facility at which analyses of the samples were performed;

(e) A description of the analytical methods used, including any cleanup and sample preparation methods;

(f) All quantitation limits achieved and all other quality control results for the analysis (including method blanks, duplicate analyses, matrix spikes, etc.), laboratory quality assurance data, and description of any deviations from analytical methods written in the plan or from any other activity written in the plan which occurred;

(g) All laboratory results demonstrating that the exclusion specifications have been met for the waste; and

(h) All laboratory documentation that supports the analytical results, unless a contract between the claimant and the laboratory provides for the documentation to be maintained by the laboratory for the period specified in subdivision k and also provides for the availability of the documentation to the claimant upon request.

(3) Syngas fuel generators shall submit for approval, prior to performing sampling, analysis, or any management of a syngas fuel as an excluded waste, a waste analysis plan containing the elements of paragraph 1 to the appropriate regulatory authority. The approval of waste analysis plans must be stated in writing and received by the facility prior to sampling and analysis to demonstrate the exclusion of a syngas. The approval of the waste analysis plan may contain such provisions and conditions as the regulatory authority deems appropriate.

h. Comparable fuel sampling and analysis.

(1) General. For each waste for which an exclusion is claimed, the generator of the hazardous waste must test for all the constituents on chapter 33-24-02, appendix V, except those that the generator determines, based on testing or knowledge, should not be present in the waste. The generator is required to document the basis of each determination that a constituent should not be present.

The generator may not determine that any of the following categories of constituents should not be present:

(a) A constituent that triggered the toxicity characteristic for the waste constituents that were the basis of the listing of the waste stream or constituents for which there is a treatment standard for the waste code in section 33-24-05-280;

(b) A constituent detected in previous analysis of the waste;

(c) Constituents introduced into the process that generates the waste; or

(d) Constituents that are byproducts or side reactions to the process that generates the waste.

Note to subdivision h: Any claim under this section must be valid and accurate for all hazardous constituents; a determination not to test for a hazardous constituent will not shield a generator from liability should that constituent later be found in the waste above the exclusion specifications.

(2) For each waste for which the exclusion is claimed when the generator of the comparable/syngas fuel is not the original generator of the hazardous waste, the generator of the comparable/syngas fuel may not use process knowledge pursuant to paragraph 1 and must test to determine that all of the constituent specifications of subdivision b of subsection 1 and subsection 2 have been met.

(3) The comparable/syngas fuel generator may use any reliable analytical method to demonstrate that no constituent of concern is present at concentrations above the specification levels. It is the responsibility of the generator to ensure that the sampling and analysis are unbiased, precise, and representative of the waste. For the waste to be eligible for exclusion, a generator must demonstrate that:

(a) Each constituent of concern is not present in the waste above the specification level at the ninety-five percent upper confidence limit around the mean; and

(b) The analysis could have detected the presence of the constituent at or below the specification level at the ninety-five percent upper confidence limit around the mean.

(4) Nothing in this subdivision preempts, overrides, or otherwise negates the provision in section 33-24-03-02, which requires any person who generates a solid waste to determine if that waste is a hazardous waste.

(5) In an enforcement action, the burden of proof to establish conformance with the exclusion specification shall be on the generator claiming the exclusion.

(6) The generator must conduct sampling and analysis in accordance with its waste analysis plan developed under subdivision g.

(7) Syngas fuel and comparable fuel that has not been blended in order to meet the kinematic viscosity specifications shall be analyzed as generated.

(8) If a comparable fuel is blended in order to meet the kinematic viscosity specifications, the generator shall:

(a) Analyze the fuel as generated to ensure that it meets the constituent and heating value specifications; and

(b) After blending, analyze the fuel again to ensure that the blended fuel continues to meet all comparable/syngas fuel specifications.

(9) Excluded comparable/syngas fuel must be retested, at a minimum, annually and must be retested after a process change that could change the chemical or physical properties of the waste.

i. Speculative accumulation. Any persons handling a comparable/syngas fuel are subject to the speculative accumulation test under subdivision d of subsection 3 of section 33-24-02-02.

j. Records. The generator must maintain records of the following information onsite:

(1) All information required to be submitted to the implementing authority as part of the notification of the claim:

(a) The owner/operator name, address, and facility identification number of the person claiming the exclusion;

(b) The applicable hazardous waste codes for each hazardous waste excluded as a fuel; and

(c) The certification signed by the person claiming the exclusion or that person's authorized representative.

(2) A brief description of the process that generated the hazardous waste and process that generated the excluded fuel, if not the same;

(3) An estimate of the average and maximum monthly and annual quantities of each waste claimed to be excluded;

(4) Documentation for any claim that a constituent is not present in the hazardous waste as required under paragraph 1;

(5) The results of all analyses and all detection limits achieved as required under subdivision h;

(6) If the excluded waste was generated through treatment or blending, documentation as required under subdivision c or d;

(7) If the waste is to be shipped offsite, a certification from the burner as required under subdivision l;

(8) A waste analysis plan and the results of the sampling and analysis that includes the following:

(a) The dates and times waste samples were obtained and the dates the samples were analyzed;

(b) The names and qualifications of the person or persons who obtained the samples;

(c) A description of the temporal and spatial locations of the samples;

(d) The name and address of the laboratory facility at which analyses of the samples were performed;

(e) A description of the analytical methods used, including any cleanup and sample preparation methods;

(f) All quantitation limits achieved and all other quality control results for the analysis (including method blanks, duplicate analyses, matrix spikes, etc.), laboratory quality assurance data, and description of any deviations from analytical methods written in the plan or from any other activity written in the plan which occurred;

(g) All laboratory analytical results demonstrating that the exclusion specifications have been met for the waste; and

(h) All laboratory documentation that supports the analytical results, unless a contract between the claimant and the laboratory provides for the documentation to be maintained by the laboratory for the period specified in subdivision k and also provides for the availability of the documentation to the claimant upon request; and

(9) If the generator ships comparable/syngas fuel offsite for burning, the generator must retain for each shipment the following information onsite:

(a) The name and address of the facility receiving the comparable/syngas fuel for burning;

(b) The quantity of comparable/syngas fuel shipped and delivered;

(c) The date of shipment or delivery;

(d) A cross-reference to the record of comparable/syngas fuel analysis or other information used to make the determination that the comparable/syngas fuel meets the specifications as required under subdivision h; and

(e) A one-time certification by the burner as required under subdivision I.

k. Records retention. Records must be maintained for the period of three years. A generator must maintain a current waste analysis plan during that three-year period.

l. Burner certification. Prior to submitting a notification to the department, a comparable/syngas fuel generator who intends to ship its fuel offsite for burning must obtain a one-time written, signed statement from the burner:

(1) Certifying that the comparable/syngas fuel will only be burned in an industrial furnace or boiler, utility boiler, or hazardous waste incinerator, as required under subdivision b;

(2) Identifying the name and address of the units that will burn the comparable/syngas fuel; and

(3) Certifying that the state in which the burner is located is authorized to exclude wastes as comparable/syngas fuel under the provisions of this section.

m. Ineligible waste codes. Wastes that are listed because of presence of dioxins or furans, as set out in chapter 33-24-02, appendix IV, are not eligible for this exclusion, and any fuel produced from or otherwise containing these wastes remains a hazardous waste subject to full hazardous waste management requirements.

History: Effective December 1, 2003.
General Authority: NDCC 23-20.3-03
Law Implemented: NDCC 23-20.3-03, 23-20.3-04

APPENDIX I
Representative Sampling Methods

The methods and equipment used for sampling waste materials will vary with the form and consistency of the waste materials to be sampled. Samples collected using the sampling protocols listed below, for sampling waste with properties similar to the indicated materials, will be considered by the agency to be representative of the waste.

Extremely viscous liquid - ASTM Standard D140-70 Crushed or powdered material - ASTM Standard D346-75 Soil or rock-like material - ASTM Standard D420-69 Soil-like material - ASTM Standard D1452-65

Fly Ash-like material - ASTM Standard D2234-76 (ASTM Standards are available from ASTM, 1916 Race Street, Philadelphia, Pennsylvania 19103)

Containerized liquid wastes - "COLIWASA" described in "Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods,"[1a] United States Environmental Protection Agency, Office of Solid Waste, Washington, D.C. 20460. (Copies may be obtained from Solid Waste Information, United States Environmental Protection Agency, 26 W. St. Clair Street, Cincinnati, Ohio 45268)

Liquid waste in pits, ponds, lagoons, and similar reservoirs. - "Pond Sampler" described in "Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods."[1]

This manual also contains additional information on application of these protocols.

[1a] These methods are also described in "Samplers and Sampling Procedures for Hazardous Waste Streams", EPA 600/2-80-018, January 1980.

APPENDIX II

Method 1311 - Toxicity Characteristic Leaching Procedure (TCLP)

Note: The toxicity characteristic leaching procedure, method 1311, is published in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", environmental protection agency publication SW-846, as incorporated by reference in section 33-24-01-05.

APPENDIX III

Chemical Analysis Test Methods

Note: Appropriate analytical procedures to determine whether a sample contains a given toxic constituent are specified in chapter two, "Choosing the Correct Procedure" found in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", environmental protection agency publication SW-846, as incorporated by reference in section 33-24-01-05. Prior to final sampling and analysis method selection, the individual should consult the specific section or method described in environmental protection agency publication SW-846, for additional guidance on which of the approved methods should be employed for a specific sample analysis situation.

APPENDIX IV
Basis for Listing Hazardous Waste

EPA Hazardous Waste No.	Hazardous Waste Constituents for Which Listed
F001	Tetrachloroethylene, methylene chloride trichloroethylene, 1,1,1-trichloroethane, carbon tetrachloride, chlorinated fluorocarbons.
F002	Tetrachloroethylene, methylene chloride, trichloroethylene, 1,1,1-trichloroethane, 1,1,2-trichloroethane chlorobenzene, 1,1,2-trichloro-1,2,2-trifluoroethane, ortho-dichlorobenzene, trichlorofluoromethane.
F003	N.A.
F004	Cresols and cresylic acid, nitrobenzene.
F005	Toluene, methyl ethyl ketone, carbon disulfide, isobutanol, pyridine, 2-ethoxyethanol, benzene, 2-nitropropane.
F006	Cadmium, hexavalent chromium, nickel, cyanide (complexed).
F007	Cyanide (salts).
F008	Cyanide (salts).
F009	Cyanide (salts).
F010	Cyanide (salts).
F011	Cyanide (salts).
F012	Cyanide (complexed).
F019	Hexavalent chromium, cyanide (complexed).
F020	Tetra- and pentachlorodibenzo-p-dioxins; tetra- and pentachlorodi-benzofurans; tri- and tetrachloro-phenols and their chlorophenoxy derivative acids, esters, ethers, amine and other salts.
F021	Penta- and hexachlorodibenzo-p-dioxins; penta- and hexachlorodibenzofurans; pentachlorophenol and its derivatives.
F022	Tetra-, penta, and hexachlorodibenzo-p-dioxins; tetra-, penta-, and hexachlorodibenzofurans.
F023	Tetra, and pentachlorodibenzo-p-dioxins; tetra-, and pentachlorodibenzofurans; tri- and tetra-chlorophenols and their chlorophenoxy derivative acids, esters, ethers, amine and other salts.
F024	Chloromethane, dichloromethane, trichloromethane, carbon tetrachloride, chloroethylene, 1,1-dichloroethane, 1,2-dichloroethane, trans-1-2-dichloroethylene, 1,1-dichloroethylene, 1,1,1-trichloroethane, 1,1,2-trichloroethane, trichloroethylene, 1,1,1,2-tetrachloroethane, 1,1,2,2-tetrachloroethane, tetrachloroethylene, pentachloroethane, hexachloroethane, allyl chloride (3-chloropropene), dichloropropane, dichloropropene, 2-chloro-1,3-butadiene, hexachloro-1,3-butadiene, hexachlorocyclopentadiene, hexachlorocyclohexane, benzene, chlorobenzene, dichlorobenzenes, trichlorobenzene, tetrachlorobenzene, pentachlorobenzene, hexachlorobenzene, toluene, naphthalene.
F025	Chloromethane; dichloromethane; 1,2,4-trichloromethane; carbon tetrachloride; chloroethylene; 1,1-dichloroethane; 1,2-dichloroethane; trans-1,2-dichloroethylene; 1,1-dichloroethylene; 1,1,1-trichloroethane; 1,1,2-trichloroethane; trichloroethylene; 1,1,1,2-tetrachloroethane; 1,1,2,2-tetrachloroethane; tetrachloroethylene; pentachloroethane; hexachloroethane; allyl chloride (3-chloropropene); dichloropropane; dichloropropene; 2-chloro-1,3-butadiene; hexachloro-1,3-butadiene; hexachlorocyclopentadiene; benzene; chlorobenzene; dichlorobenzene; 1,2,4-trichlorobenzene; tetrachlorobenzene; pentachlorobenzene; hexachlorobenzene; toluene; naphthalene.
F026	Tetra-, penta-, and hexachlorodibenzo-p-dioxins; tetra-, penta-, and hexachlorodibenzofurans.
F027	Tetra-, penta-, and hexachlorodibenzo-p-dioxins; tetra-, penta-, and hexachlorodibenzofurans; tri-, tetra-, and pentachlorophenols and their chlorophenoxy derivative acids, esters, ethers, amine and other salts.
F028	Tetra-, penta-, and hexachlorodibenzo-p-dioxins; tetra-, penta-, and hexachlorodibenzofurans; tri-, tetra-, and pentachlorophenols and their chlorophenoxy derivative acids, esters, ethers, amine and other salts.

EPA Hazardous Waste No.	Hazardous Waste Constituents for Which Listed
F032	Benz(a)anthracene, benzo(a)pyrene, dibenz(a,h)-anthracene,indeno(1,2,3-cd)pyrene, pentachlorophenol, arsenic, chromium, tetra-, penta-, hexa-, heptachlorodibenzo-p-dioxins, tetra-, penta-, hexa-, heptachlorodibenzofurans.
F034	Benz(a)anthracene, benzo(k)fluoranthene, benzo(a)pyrene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene, naphthalene, arsenic, chromium.
F035	Arsenic, chromium, lead.
F037	Benzene, benzo(a)pyrene, chrysene, lead, chromium.
F038	Benzene, benzo(a)pyrene, chrysene, lead, chromium.
F039	All constituents for which treatment standards are specified for multisource leachate (wastewaters and nonwastewaters) under subsection 1 of section 33-24-05-283, Table CCW.
K001	Pentachlorophenol, phenol, 2-chlorophenol, p-chloro-m-cresol, 2,4-dimethylphenyl, 2,4-dinitrophenol, trichlorophenols, tetrachlorophenols, 2,4-dinitrophenol, creosote, chrysene, naphthalene, fluoranthene, benzo(b)fluoranthene, benzo(a)pyrene, indeno(1,2,3-cd) pyrene, benz(a)anthracene, dibenz(a)anthracene, acenaphthalene.
K002	Hexavalent chromium, lead.
K003	Hexavalent chromium, lead.
K004	Hexavalent chromium.
K005	Hexavalent chromium, lead.
K006	Hexavalent chromium.
K007	Cyanide (complexed), hexavalent chromium.
K008	Hexavalent chromium.
K009	Chloroform, formaldehyde, methylene chloride, methyl chloride, paraldehyde, formic acid.
K010	Chloroform, formaldehyde, methylene chloride, methyl chloride, paraldehyde, formic acid, chloroacetaldehyde.
K011	Acrylonitrile, acetonitrile, hydrocyanic acid.
K013	Hydrocyanic acid, acrylonitrile, acetonitrile.
K014	Acetonitrile, acrylamide.
K015	Benzyl chloride, chlorobenzene, toluene, benzotrichloride.
K016	Hexachlorobenzene, hexachlorobutadiene, carbon tetrachloride, hexachloroethane, perchloroethylene.
K017	Epichlorohydrin, chloroethers [bis(chloromethyl) ether and bis (2-chloroethyl) ethers], trichloropropane, dichloropropanols.
K018	1,2-dichloroethane, trichloroethylene, hexachlorobutadiene, hexachlorobenzene.
K019	Ethylene dichloride, 1,1,1-trichloroethane, 1,1,2-trichloroethane, tetrachloroethanes (1,1,2,2-tetrachloroethane and 1,1,1,2-tetrachloroethane), trichloroethylene, tetrachloroethylene, carbon tetrachloride, chloroform, vinyl chloride, vinylidene chloride.
K020	Ethylene dichloride, 1,1,1-trichloroethane, 1,1,2-trichloroethane, tetrachloroethanes, (1,1,2,2-tetrachloroethane and 1,1,1,2-tetrachloroethane), trichloroethylene, tetrachloroethylene, carbon tetrachloride, chloroform, vinyl chloride, vinylidene chloride.
K021	Antimony, carbon tetrachloride, chloroform.
K022	Phenol, tars (polycyclic aromatic hydrocarbons).
K023	Phthalic anhydride, maleic anhydride.
K024	Phthalic anhydride, 1,4-naphthoquinone.
K025	Meta-dinitrobenzene, 2,4-dinitrotoluene.
K026	Paraldehyde, pyridines, 2-picoline.
K027	Toluene diisocyanate, toluene-2,4-diamine.

EPA Hazardous Waste No.	Hazardous Waste Constituents for Which Listed
K028	1,1,1-trichloroethane, vinyl chloride.
K029	1,2-dichloroethane, 1,1,1-trichloroethane, vinyl chloride, vinylidene chloride, chloroform.
K030	Hexachlorobenzene, hexachlorobutadiene, hexachloroethane, 1,1,1,2-tetrachloroethane, 1,1,2,2-tetrachloroethane, ethylene dichloride.
K031	Arsenic.
K032	Hexachlorocyclopentadiene.
K033	Hexachlorocyclopentadiene.
K034	Hexachlorocyclopentadiene.
K035	Creosote, chrysene, naphthalene, fluoranthene, benzo(b)fluoranthene, benzo(a)pyrene, indeno(1,2,3-cd)pyrene, benzo(a)anthracene dibenzo(a)anthracene, acenaphthalene.
K036	Toluene, phosphorodithioic and phosphorothioic acid esters.
K037	Toluene, phosphorodithioic and phosphorothioic acid esters.
K038	Phorate, formaldehyde, phosphorodithioic and phosphorothioic acid esters.
K039	Phosphorodithioic and phosphorothioic acid esters.
K040	Phorate, formaldehyde, phosphorodithioic and phosphorothioic acid esters.
K041	Toxaphene.
K042	Hexachlorobenzene, ortho-dichlorobenzene.
K043	2,4-dichlorophenol, 2,6-dichlorophenol, 2,4,6-trichlorophenol.
K044	N.A.
K045	N.A.
K046	Lead.
K047	N.A.
K048	Hexavalent chromium, lead.
K049	Hexavalent chromium, lead.
K050	Hexavalent chromium.
K051	Hexavalent chromium, lead.
K052	Lead.
K060	Cyanide, naphthalene, phenolic compounds, arsenic.
K061	Hexavalent chromium, lead, cadmium.
K062	Hexavalent chromium, lead.
K069	Hexavalent chromium, lead, cadmium.
K071	Mercury.
K073	Chloroform, carbon tetrachloride, hexachloroethane, trichloroethane, tetrachloroethylene, dichloroethylene, 1,1,2,2-tetrachloroethane.
K083	Aniline, diphenylamine, nitrobenzene, phenylenediamine.
K084	Arsenic.
K085	Benzene, dichlorobenzenes, trichlorbenzenes, tetrachloroenzenes, pentachlorobenzene, hexachlorobenzene, benzyl chloride.
K086	Lead, hexavalent chromium.
K087	Phenol, naphthalene.
K088	Cyanide (complexes).
K093	Phthalic anhydride, maleic anhydride.

EPA Hazardous Waste No.	Hazardous Waste Constituents for Which Listed
K094	Phthalic anhydride.
K095	1,1,2-trichloroethane, 1,1,1,2-tetrachloroethane, 1,1,2,2-tetrachloroethane.
K096	1,2-dichloroethane, 1,1,1-trichloroethane, 1,1,2-trichloroethane.
K097	Chlordane, heptachlor.
K098	Toxaphene.
K099	2,4-dichlorophenol, 2,4,6-trichlorophenol.
K100	Hexavalent chromium, lead, cadmium.
K101	Arsenic.
K102	Arsenic.
K103	Aniline, nitrobenzene, phenylenediamine.
K104	Aniline, benzene, diphenylamine, nitrobenzene, phenylenediamine.
K105	Benzene, monochlorobenzene, dichlorobenzenes, 2,4,6-trichlorophenol.
K106	Mercury.
K107	1,1-Dimethylhydrazine (UDMH).
K108	1,1-Dimethylhydrazine (UDMH).
K109	1,1-Dimethylhydrazine (UDMH).
K110	1,1-Dimethylhydrazine (UDMH).
K111	2,4-dinitrotoluene.
K112	2,4-toluenediamine, o-toluidine, p-toluidine, aniline.
K113	2,4-toluenediamine, o-toluidine, p-toluidine, aniline.
K114	2,4-toluenediamine, o-toluidine, p-toluidine.
K115	2,4-toluenediamine.
K116	Carbon tetrachloride, tetrachloroethylene, chloroform, phosgene.
K117	Ethylene dibromide.
K118	Ethylene dibromide.
K123	Ethylene thiourea.
K124	Ethylene thiourea.
K125	Ethylene thiourea.
K126	Ethylene thiourea.
K131	Dimethyl sulfate, methyl bromide.
K132	Methyl bromide.
K136	Ethylene dibromide.
K141	Benzene, benz(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene.
K142	Benzene, benz(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene.
K143	Benzene, benz(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene.
K144	Benzene, benz(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, dibenz(a,h)anthracene.
K145	Benzene, benz(a)anthracene, benzo(a)pyrene, dibenz(a,h)anthracene, naphthalene.

EPA Hazardous Waste No.	Hazardous Waste Constituents for Which Listed
K147	Benzene, benz(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene.
K148	Benz(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene.
K149	Benzotrichloride, benzyl chloride, chloroform, chloromethane, chlorobenzene, 1,4-dichlorobenzene, hexachlorobenzene, pentachlorobenzene, 1,2,4,5-tetrachlorobenzene, toluene.
K150	Carbon tetrachloride, chloroform, chloromethane, 1,4-dichlorobenzene, hexachlorobenzene, pentachlorobenzene, 1,2,4,5-tetrachlorobenzene, 1,1,2,2-tetrachloroethane, tetrachloroethylene, 1,2,4-trichlorobenzene.
K151	Benzene, carbon tetrachloride, chloroform, hexachlorobenzene, pentachlorobenzene, toluene, 1,2,4,5-tetrachlorobenzene, tetrachloroethylene.
K156	Benomyl, carbaryl, carbendazim, carbofuran, carbosulfan, formaldehyde, methylene chloride, triethylamine.
K157	Carbon tetrachloride, formaldehyde, methyl chloride, methylene chloride, pyridine, triethylamine.
K158	Benomyl, carbendazim, carbofuran, carbosulfan, chloroform, methylene chloride.
K159	Benzene, butylate, eptc, molinate, pebulate, vernolate.
K161	Antimony, arsenic, metam-sodium, ziram.
K169	Benzene.
K170	Benzo(a)pyrene, dibenz(a,h)anthracene, benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, 3-methylcholanthrene, 7, 12-dimethylbenz(a)anthracene.
K171	Benzene, arsenic.
K172	Benzene, arsenic.
K174	1,2,3,4,6,7,8-Heptachlorodibenzo- p-dioxin (1,2,3,4,6,7,8-HpCDD), 1,2,3,4,6,7,8-Heptachlorodibenzofuran (1,2,3,4,6,7,8-HpCDF), 1,2,3,4,7,8,9-Heptachlorodibenzofuran (1,2,3,4,7,8,9-HpCDF), HxCDDs (All Hexachlorodibenzo-p- dioxins), HxCDFs (All Hexachlorodibenzofurans), PeCDDs (All Pentachlorodibenzo- p-dioxins), OCDD (1,2,3,4,6,7,8,9- Octachlorodibenzo-p-dioxin), OCDF (1,2,3,4,6,7,8,9-Octachlorodibenzofuran), PeCDFs (All Pentachlorodibenzofurans), TCDDs (All Tetrachlorodibenzo- p-dioxins), TCDFs (All Tetrachlorodibenzofurans).
K175	Mercury.
K176	Arsenic, lead.
K177	Antimony.
K178	Thallium.

N.A. - Waste is hazardous because it fails the test for the characteristic of ignitability, corrosivity, or reactivity.

APPENDIX V
Hazardous Constituents

Common Name	Chemical Abstracts Name	Chemical Abstracts No.	Hazardous Waste No.
A2213	Ethanimidothioic acid, 2-(dimethylamino)-N-hydroxy-2-oxo-, methyl ester	30558-43-1	U394
Acetonitrile	Same	75-05-8	U003
Acetophenone	Ethanone, 1-phenyl-	98-86-2	U004
2-Acetylaminefluarone	Acetamide, N-9H-fluoren-2-yl-	53-96-3	U005
Acetyl chloride	Same	75-36-5	U006
1-Acetyl-2-thiourea	Acetamide, N-(aminothioxomethyl)-	591-08-2	P002
Acrolein	2-Propenal	107-02-08	P003
Acrylamide	2-Propenamide	79-06-1	U007
Acrylonitrile	2-Propenenitrile	107-13-1	U009
Aflatoxins	Same	1402-68-2	
Aldicarb	Propanal, 2-methyl-2-(methylthio)-, O-[(methylamino)carbonyl]oxime	116-06-3	P070
Aldicarb sulfone	Propanal, 2-methyl-2- (methylsulfonyl) -, O-[(methylamino) carbonyl] oxime	1646-88-4	P203
Aldrin	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-10-hexachloro-1,4,4a,5,8,8a-hexahydro-,(1alpha,4alpha,4abeta,5alpha, 8alpha,8abeta)-	309-00-2	P004
Allyl alcohol	2-Propen-1-ol	107-18-6	P005
Allyl chloride	1-Propane, 3-chloro	107-18-6	
Aluminum phosphide	Same	20859-73-8	P006
4-Aminobiphenyl	[1,1'-Biphenyl]-4-amine	92-67-1	
5-(Aminomethyl)-3-isoxazolol	3(2H)-Isoxazolone, 5-(aminomethyl)-	2763-96-4	P007
4-Aminopyridine	4-Pyridinamine	504-24-5	P008
Amitrole	1H-1,2,4-Triazol-3-amine	61-82-5	U011
Ammonium vanadate	Vanadic acid, ammonium salt	7803-55-6	P119
Aniline	Benzenamine	62-53-3	U012
Antimony	Same	7440-36-0	
Antimony compounds, N.O.S.[1]			
Aramite	Sulfurous acid, 2-chloroethyl 2-[4-(1,1-dimethylethyl)phenoxy]-1-methylethyl ester	140-57-8	
Arsenic	Same	7440-38-2	
Arsenic compounds, N.O.S.[1]			
Arsenic acid	Arsenic acid H_3AsO_4	7778-39-4	P010
Arsenic pentoxide	Arsenic oxide As_2O_5	1303-28-2	P011
Arsenic trioxide	Arsenic oxide As_2O_3	1327-53-3	P012
Auramine	Benzenamine, 4,4'-carbonimidoylbis[N,N-dimethyl	492-80-8	U014
Azaserine	L-Serine, diazoacetate (ester)	115-02-6	U015

Common Name	Chemical Abstracts Name	Chemical Abstracts No.	Hazardous Waste No.
Barban	Carbamic acid, (3-chlorophenyl) -, 4-chloro-2-butynyl ester	101-27-9	U280
Barium	Same	7440-39-3	
Barium compounds, N.O.S.[1]			
Barium cyanide	Same	542-62-1	P013
Bendiocarb	1,3-Benzodioxol-4-ol, 2,2-dimethyl-, methyl carbamate	22781-23-3	U278
Bendiocarb pheonol	1,3-Benzodioxol-4-ol, 2,2-dimethyl-,	22961-82-6	U364
Benomyl	Carbamic acid, [1- [(butylamino) carbonyl]-1H-benzimidazol-2-yl] -, methyl ester	17804-35-2	U271
Benz[c]acridine	Same	225-51-4	U016
Benz[a]anthracene	Same	56-55-3	U018
Benzal chloride	Benzene, (dichloromethyl)-	98-87-3	U017
Benzene	Same	71-43-2	U019
Benzenearsonic acid	Arsonic acid, phenyl-	98-05-5	
Benzidine	[1,1'-Biphenyl]-4,4'-diamine	92-87-5	U021
Benzo[b]fluoranthene	Benz[e]acephenanthrylene	205-99-2	
Benzo[j]fluoranthene	Same	205-82-3	
Benzo[k]fluoranthene	Same	207-08-9	
Benzo[a]pyrene	Same	50-32-8	U022
p-Benzoquinone	2,5-Cyclohexadiene-1,4-dione	106-51-4	U197
Benzotrichloride	Benzene, (trichloromethyl)-	98-07-7	U023
Benzyl chloride	Benzene, (chloromethyl)-	100-44-7	P028
Beryllium powder	Same	7440-41-7	P015
Beryllium compounds, N.O.S.[1]			
Bis (pentamethylene)-thiuram tetrasulfide	Piperidine, 1,1'-(tetrathiodicarbonothioyl)-bis-	120-54-7	
Bromoacetone	2-Propanone, 1-bromo-	598-31-2	P017
Bromoform	Methane, tribromo-	75-25-2	U225
4-Bromophenyl phenyl ether	Benzene, 1-bromo-4-phenoxy-	101-55-3	U030
Brucine	Strychnidin-10-one, 2,3-dimethoxy-	357-57-3	P018
Butyl benzyl phthalate	1,2-Benzenedicarboxylic acid, butyl phenylmethyl ester	85-68-7	
Butylate	Carbamothioic acid, bis (2-methylpropyl)-,S-ethyl ester	2008-41-5	
Cacodylic acid	Arsinic acid, dimethyl-	75-60-5	U136
Cadmium	Same	7440-43-9	
Cadmium compounds, N.O.S.[1]			
Calcium chromate	Chromic acid H_2CrO_4, calcium salt	13765-19-0	U032
Calcium cyanide	Calcium cyanide $Ca(CN)_2$	592-01-8	P021
Carbaryl	1-Naphthalenol, methylcarbamate	63-25-2	U279

Common Name	Chemical Abstracts Name	Chemical Abstracts No.	Hazardous Waste No.
Carbendazim	Carbamic acid, 1H-benzimidazol-2-yl, methyl ester	10605-21-7	U372
Carbofuran	7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-,methylcarbamate	1563-66-2	P127
Carbofuran phenol	7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-	1563-38-8	U367
Carbon disulfide	Same	75-15-0	P022
Carbon oxyfluoride	Carbonic difluoride	353-50-4	U033
Carbon tetrachloride	Methane, tetrachloro-	56-23-5	U211
Carbosulfan	Carbamic acid, [(dibutylamino) thio] methyl-, 2,3-dihydro-2,2-dimethyl-7- benzofuranyl ester	55285-14-8	P189
Chloral	Acetaldehyde, trichloro-	75-87-6	U034
Chlorambucil	Benzenebutanoic acid, 4-[bis(2-chloroethyl)amino]-	305-03-3	U035
Chlordane	4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7, 7a-hexahydro-	57-74-9	U036
Chlordane (alpha and gamma isomers)			U036
Chlorinated benzenes, N.O.S.[1]			
Chlorinated ethane, N.O.S.[1]			
Chlorinated fluorocarbons, N.O.S.[1]			
Chlorinated naphthalene, N.O.S.[1]			
Chlorinated phenol, N.O.S.[1]			
Chlornaphazin	Naphthalenamine, N,N'-bis(2-chloroethyl)-	494-03-1	U026
Chloroacetaldehyde	Acetaldehyde, chloro-	107-20-0	P023
Chloroalkyl ethers, N.O.S.[1]			
p-Chloroaniline	Benzenamine, 4-chloro-	106-47-8	P024
Chlorobenzene	Benzene, chloro-	108-90-7	U037
Chlorobenzilate	Benzeneacetic acid, 4-chloro-alpha-(4-chlorophenyl)-alpha-hydroxy-, ethyl ester	510-15-6	U038
p-Chloro-m-cresol	Phenol, 4-chloro-3-methyl-	59-50-7	U039
2-Chloroethyl vinyl ether	Ethene, (2-chloroethoxy)-	110-75-8	U042
Chloroform	Methane, trichloro-	67-66-3	U044
Chloromethyl methyl ether	Methane, chloromethoxy-	107-30-2	U046
beta-Chloronaphthalene	Naphthalene, 2-chloro-	91-58-7	U047
o-Chlorophenol	Phenol, 2-chloro-	95-57-8	U048
1-(0-Chlorophenyl)thiourea	Thiourea, (2-chlorophenyl)-	5344-82-1	P026
Chloroprene	1,3-Butadiene, 2-chloro-	126-99-8	
3-Chloropropionitrile	Propanenitrile, 3-chloro-	542-76-7	P027
Chromium	Same	7440-47-3	
Chromium compounds, N.O.S.[1]			
Chrysene	Same	218-01-9	U050
Citrus red No. 2	2-Naphthalenol, 1-[(2,5-dimethoxyphenyl)azo]-	6358-53-8	

Common Name	Chemical Abstracts Name	Chemical Abstracts No.	Hazardous Waste No.
Coal tar creosote	Same	8007-45-2	
Copper cyanide	Copper cyanide CuCN	544-92-3	P029
Copper dimethyldithiocarbamate	Copper, bis(dimethylcarbamodithioato-S,S')-,	137-29-1	
Cresote	Same		U051
Cresol (Cresylic acid)	Phenol, methyl-	1319-77-3	U052
Crotonaldehyde	2-Butenal	4170-30-3	U053
m-Cumenyl methylcarbamate	Phenol, 3-(methylethyl)-, methyl carbamate	64-00-6	P202
Cyanides (soluble salts and complexes) N.O.S.[1]			P030
Cyanogen	Ethanedinitrile	460-19-5	P031
Cyanogen bromide	Cyanogen bromide (CN)Br	506-68-3	U246
Cyanogen chloride	Cyanogen chloride (CN)Cl	506-77-4	P033
Cycasin	beta-D-Glucopyranoside, (methyl-ONN-azoxy)methyl	14901-08-7	
Cycloate	Carbamothioic acid, cyclophexylethyl-, S-ethyl ester	1134-23-2	
2-Cyclohexyl-4,6-dinitrophenol	Phenol, 2-cyclohexyl-4,6-dinitro-	131-89-5	P034
Cyclophosphamide	2H-1,3,2-Oxazaphosphorin-2-amine, N,N-bis(2-chloroethyl)tetrahydro-, 2-oxide	50-18-0	U058
2,4-D	Acetic acid, (2,4-dichlorophenoxy)-	94-75-7	U240
2,4-D, salts, esters			U240
Daunomycin	5,12-Naphthacenedione, 8-acetyl-10-[(3-amino-2,3,6-trideoxy-alpha-L-lyxo-hexopyranosyl)oxy]-7,8,9,10-tetrahydro-6,8, 11-trihydroxy-1-methoxy-, (8S-cis)-	20830-81-3	U059
DDD	Benzene, 1,1'-(2,2-dichloroethylidene)bis[4-chloro-	72-54-8	U060
DDE	Benzene, 1,1'-dichloroethenylidene)bis[4-chloro-	72-55-9	
DDT	Benzene, 1,1'-(2,2,2-trichloroethylidene)bis[4-chloro-	50-29-3	U061
Dazomet	2H-1,3,5-thiadiazine-2-thione, tetrahydro-3,5-dimethyl	533-74-4	
Diallate	Carbamothioic acid, bis(1-methylethyl)-, S(2,3-dichloro-2-propenyl) ester	2303-16-4	U062
Dibenz[a,h]acridine	Same	226-36-8	
Dibenz[a,j]acridine	Same	224-42-0	
Dibenz[a,h]anthracene	Same	53-70-3	U063
7H-Dibenzo[c,g]carbazole	Same	194-59-2	
Dibenzo[a,e]pyrene	Naphtho[1,2,3,4-def]chrysene	192-65-4	
Dibenzo[a,h]pyrene	Dibenzo[b,def]chrysene	189-64-0	
Dibenzo[a,i]pyrene	Benzo[rst]pentaphene	189-55-9	U064
1,2-Dibromo-3-chloropropane	Propane, 1,2-dibromo-3-chloro-	96-12-8	U066
Dibutyl phthalate	1,2-Benzenedicarboxylic acid, dibutyl ester	84-74-2	U069
o-Dichlorobenzene	Benzene, 1,2-dichloro-	95-50-1	U070
m-Dichlorobenzene	Benzene, 1,3-dichloro-	541-73-1	U071

Common Name	Chemical Abstracts Name	Chemical Abstracts No.	Hazardous Waste No.
p-Dichlorobenzene	Benzene, 1,4-dichloro-	106-46-7	U072
Dichlorobenzene, N.O.S.[1]	Benzene, dichloro-	25321-22-6	
3,3'-Dichlorobenzidine	[1,1'-Biphenyl]-4,4'-diamine, 3,3'-dichloro-	91-94-1	U073
1,4-Dichloro-2-butene	2-Butene, 1,4-dichloro-	764-41-0	U074
Dichlorodifluoromethane	Methane, dichlorodifluoro-	75-71-8	U075
Dichloroethylene, N.O.S.[1]	Dichloroethylene	25323-30-2	
1,1-Dichloroethylene	Ethene, 1,1-dichloro-	75-35-4	U078
1,2-Dichloroethylene	Ethene, 1,2-dichloro-, (E)-	156-60-5	U079
Dichloroethyl ether	Ethane, 1,1'oxybis[2-chloro-	111-44-4	U025
Dichloroisopropyl ether	Propane, 2,2'-oxybis[2-chloro-	108-60-1	U027
Dichloromethoxy ethane	Ethane, 1,1'-[methylenebis(oxy)]bis[2-chloro-	111-91-1	U024
Dichloromethyl ether	Methane, oxybis[chloro-	542-88-1	P016
2,4-Dichlorophenol	Phenol, 2,4-dichloro-	120-83-2	U081
2,6-Dichlorophenol	Phenol, 2,6-dichloro-	87-65-0	U082
Dichlorophenylarsine	Arsonous dichloride, phenyl-	696-28-6	P036
Dichloropropane, N.O.S.[1]	Propane, dichloro-	26638-19-7	
Dichloropropanol, N.O.S.[1]	Propanol, dichloro-	26545-73-3	
Dichloropropene, N.O.S.[1]	1-Propene, dichloro-	26952-23-8	
1,3-Dichloropropene	1-Propene, 1,3-dichloro-	542-75-6	U084
Dieldrin	2,7:3,6-Dimethanonaphth[2,3-b]oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a, 7,7aoctahydro-,(1aalpha,2beta,2aalpha, 3beta,6beta,6aalpha,7beta,7aalpha)-	60-57-1	P037
1,2:3,4-Diepoxybutane	2,2'-Bioxirane	1464-53-5	U085
Diethylarsine	Arsine, diethyl-	692-42-2	P038
Diethylene glycol, dicarbamate	Ethanol, 2,2'-oxybis-, dicarbamate	5952-26-1	U395
1,4-Diethyleneoxide	1,4-Dioxane	123-91-1	U108
Diethylhexyl phthalate	1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester	117-81-7	U028
N,N'-Diethylhydrazine	Hydrazine, 1,2-diethyl-	1615-80-1	U086
O,O-Diethyl S-methyl dithiophosphate	Phosphorodithioic acid, O,O-diethyl S-methyl ester	3288-58-2	U087
Diethyl-p-nitrophenyl phosphate	Phosphoric acid, diethyl 4-nitrophenyl ester	311-45-5	P041
Diethyl phthalate	1,2-Benzenedicarboxylic acid, diethyl ester	84-66-2	U088
O,O-Diethyl O-pyrazinyl phosphorothioate	Phosphorothioic acid, O,O-diethyl O-pyrazinyl ester	297-97-2	P040
Diethylstilbesterol	Phenol, 4,4'-(1,2-diethyl-1,2-ethenediyl)bis-, (E)-	56-53-1	U089
Dihydrosafrole	1,3-Benzodioxole, 5-propyl-	94-58-6	U090
Diisopropylfluorophosphate (DFP)	Phosphorofluoridic acid, bis(1-methylethyl) ester	55-91-4	P043
Dimethoate	Phosphorodithioic acid, O,O-dimethyl S-[2-(methylamino)-2-oxoethyl] ester	60-51-5	P044
3,3'-Dimethoxybenzidine	[1,1'-Biphenyl]-4,4'-diamine, 3,3'-dimethoxy-	119-90-4	U091
p-Dimethylaminoazobenzene	Benzenamine, N,N-dimethyl-4-(phenylazo)-	60-11-7	U093

Common Name	Chemical Abstracts Name	Chemical Abstracts No.	Hazardous Waste No.
7,12-Dimethylbenz[a]anthracene	Benz[a]anthracene, 7,12-dimethyl-	57-97-6	U094
3,3'-Dimethylbenzidine	[1,1'-Biphenyl]-4,4'-diamine, 3,3'-dimethyl-	119-93-7	U095
Dimethylcarbamoyl chloride	Carbamic chloride, dimethyl-	79-44-7	U097
1,1-Dimethylhydrazine	Hydrazine, 1,1-dimethyl-	57-14-7	U098
1,2-Dimethylhydrazine	Hydrazine, 1,2-dimethyl-	540-73-8	U099
alpha,alpha-Dimethylphene thylamine	Benzeneethanamine, alpha,alpha-dimethyl-	122-09-8	P046
2,4-Dimethylphenol	Phenol, 2,4-dimethyl-	105-67-9	U101
Dimethyl phthalate	1,2-Benzenedicarboxylic acid, dimethyl ester	131-11-3	U102
Dimethyl sulfate	Sulfuric acid, dimethyl ester	77-78-1	U103
Dimetilan	Carbamic acid, dimethyl-, 1-[(dimethylamino)carbonyl]-5-methyl-1H-pyrazol-3-yl ester	644-64-4	P191
Dinitrobenzene, N.O.S.[1]	Benzene, dinitro-	25154-54-5	
4,6-Dinitro-o-cresol	Phenol, 2-methyl-4,6-dinitro-	534-52-1	P047
4,6-Dintro-o-cresol salts			P047
2,4-Dinitrophenol	Phenol, 2,4-dinitro-	51-28-5	P048
2,4-Dinitrotoluene	Benzene, 1-methyl-2,4-dinitro-	121-14-2	U105
2,6-Dinitrotoluene	Benzene, 2-methyl-1,3-dinitro-	606-20-2	U106
Dinoseb	Phenol, 2-(1-methylpropyl)-4,6-dinitro-	88-85-7	P020
Di-n-octyl phthalate	1,2-Benzenedicarboxylic acid, dioctyl ester	117-84-0	U017
Diphenylamine	Benzenamine, N-phenyl-	122-39-4	
1,2-Diphenylhydrazine	Hydrazine, 1,2-diphenyl-	122-66-7	U109
Di-n-propylnitrosamine	1-Propanamine, N-nitroso-N-propyl-	621-64-7	U111
Disulfiram	Thioperoxydicarbonic diamide, tetraethyl	97-77-8	
Disulfoton	Phosphorodithioic acid, O,O-diethyl S-[2-(ethylthio)ethyl] ester	298-04-4	P039
Dithiobiuret	Thioimidodicarbonic diamide $[(H_2N)C(S)]_2NH$	541-53-7	P049
EPTC	Carbamothioic acid, dipropyl-, S-ethyl ester	759-94-4	
Endosulfan	6,9-Methano-2,4,3-benzodioxathiepin, 6,7,8,9,10,10-hexachloro-1,5,5a,6,9, 9a-hexahydro-, 3-oxide	115-29-7	P050
Endothall	7-Oxabicyclo[2.2.1]heptane-2,3-dicarboxylic acid	145-73-3	P088
Endrin	2,7:3,6-Dimethanonaphth[2,3-b]oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7, 7a-octahydro-,(1aalpha,2beta,2abeta,3alpha, 6alpha,6abeta,7beta,7aalpha)-	72-20-8	P051
Endrin metabolites			P051
Epichlorohydrin	Oxirane, (chloromethyl)-	106-89-8	U041
Epinephrine	1,2-Benzenediol, 4-[1-hydroxy-2-(methylamino)ethyl]-, (R)-	51-43-4	P042
Ethyl carbamate (urethane)	Carbamic acid, ethyl ester	51-79-6	U238
Ethyl cyanide	Propanenitrile	107-12-0	P101
Ethyl Ziram	Zinc, bis(diethylcarbamodithioato-S,S')-	14324-55-1	

Common Name	Chemical Abstracts Name	Chemical Abstracts No.	Hazardous Waste No.
Ethylenebisdithiocarbamic acid	Carbamodithioic acid, 1,2-ethanediylbis-	111-54-6	U114
Ethylenebisdithiocarbamic acid, salts and esters			U114
Ethylene dibromide	Ethane, 1,2-dibromo-	106-93-4	U067
Ethylene dichloride	Ethane, 1,2-dichloro-	107-06-2	U077
Ethylene glycol monoethyl ether	Ethanol, 2-ethoxy-	110-80-5	U359
Ethyleneimine	Aziridine	151-56-4	P054
Ethylene oxide	Oxirane	75-21-8	U115
Ethylenethiourea	2-Imidazolidinethione	96-45-7	U116
Ethylidene dichloride	Ethane, 1,1-dichloro-	75-34-3	U076
Ethyl methacrylate	2-Propenoic acid, 2-methyl-, ethyl ester	97-63-2	U118
Ethyl methanesulfonate	Methanesulfonic acid, ethyl ester	62-50-0	U119
Famphur	Phosphorothioic acid, O-[4-[(dimethylamino)sulfonyl]phenyl] O,O-dimethyl ester	52-85-7	P097
Ferbam	Iron, tris(dimethylcarbamodithioato-S,S')-,	14484-64-1	
Fluoranthene	Same	206-44-0	U120
Fluorine	Same	7782-41-4	P056
Fluoroacetamide	Acetamide, 2-fluoro-	640-19-7	P057
Fluoroacetic acid, sodium salt	Acetic acid, fluoro-, sodium salt	62-74-8	P058
Formaldehyde	Same	50-00-0	U122
Formetanate hydrochloride	Methanimidamide, N,N-dimethyl-N'-[3-[[(methylamino)carbonyl] oxy]phenyl]-, monohydrochloride	23422-53-9	P198
Formic acid	Same	64-18-6	U123
Formparante	Methanimidamide, N,N-dimethyl-N'-[2-methyl-4-[[(methylamino) carbonyl]oxy]phenyl]-.	17702-57-7	p197
Glycidylaldehyde	Oxiranecarboxyaldehyde	765-34-4	U126
Halomethanes, N.O.S.[1]			
Heptachlor	4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro-	76-44-8	P059
Heptachlor epoxide	2,5-Methano-2H-indeno[1,2-b]oxirene, 2,3,4,5,6,7,7-heptachloro-1a,1b,5,5a,6, 6a-hexa-hydro-, (1aalpha,1bbeta,2alpha,5alpha, 5abeta,6beta,6aalpha)-	1024-57-3	
Heptachlor epoxide (alpha, beta, and gamma isomers)			
Heptachlorodibenzofurans.			
Heptachlorodibenzo-p-dioxins			
Hexachlorobenzene	Benzene, hexachloro-	118-74-1	U127
Hexachlorobutadiene	1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	87-68-3	U128
Hexachlorocyclopentadiene	1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro-	77-47-4	U130
Hexachlorodibenzo-p-dioxins			
Hexachlorodibenzofurans			

Common Name	Chemical Abstracts Name	Chemical Abstracts No.	Hazardous Waste No.
Hexachloroethane	Ethane, hexachloro-	67-72-1	U131
Hexachlorophene	Phenol, 2,2'-methylenebis[3,4,6-trichloro-	70-30-4	U132
Hexachloropropene	1-Propene, 1,1,2,3,3,3-hexachloro-	1888-71-7	U243
Hexaethyl tetraphosphate	Tetraphosphoric acid, hexaethyl ester	757-58-4	P062
Hydrazine	Same	302-01-2	U133
Hydrogen cyanide	Hydrocyanic acid	74-90-8	P063
Hydrogen fluoride	Hydrofluoric acid	7664-39-3	U134
Hydrogen sulfide	Hydrogen sulfide H_2S	7783-06-4	U135
Indeno[1,2,3-cd]pyrene	Same	193-39-5	U137
3-Iodo-2-propynyl n-butylcarbamate	Carbamic acid, butyl-, 3-iodo-2-propynyl ester	55406-53-6	
Isobutyl alcohol	1-Propanol, 2-methyl-	78-83-1	U140
Isodrin	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-1,4,4a,5,8, 8a-hexahydro,(1alpha,4alpha,4abeta,5beta, 8beta,-8abeta) -	465-73-6	P060
Isolan	Carbamic acid, dimethyl-, 3-methyl-1-(1-methylethyl)-1H-pyrazol-5-yl ester	119-38-0	P192
Isosafrole	1,3-Benzodioxole, 5-(1-propenyl)-	120-58-1	U141
Kepone	1,3,4-Metheno-2H-cyclobuta[cd]pentalen-2-one, 1,1a,3,3a,4,5,5,5a,5b,6-decachlorooctahydro-	143-50-0	U142
Lasiocarpine	2-Butenoic acid, 2-methyl-,7-[[2,3-dihydroxy-2-(1-methoxyethyl)-3-methyl-1 -oxobutoxy]menthyl]-2,3,5,7a-tetrahydro-1H-pyrrolizin-1-yl ester, [1S-[1alpha(Z),7(2S*,3R*),7aalpha]]-	303-34-1	4143
Lead	Same	7439-92-1	
Lead compounds, N.O.S.[1]			
Lead acetate	Acetic acid, lead(2+) salt	301-04-2	U144
Lead phosphate	Phosphoric acid, lead(2+) salt (2:3)	7446-27-7	U145
Lead subacetate	Lead, bis(acetato-O)tetrahydroxytri-	1335-32-6	U146
Lindane	Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)-	58-89-9	U129
Maleic anhydride	2,5-Furandione	108-31-6	U147
Maleic hydrazide	3,6-Pyridazinedione, 1,2-dihydro-	123-33-1	U148
Malononitrile	Propanedinitrile	109-77-3	U149
Manganese dimethyldithiocarbamate	Manganese, bis(dimethylcarbamodithioato-S,S')-,	15339-36-3	P196
Melphalan	L-Phenylalanine, 4-[bis(2-chloroethyl)aminol]-	148-82-3	U150
Mercury	Same	7439-97-6	U151
Mercury compounds, N.O.S.[1]			
Mercury fulminate	Fulminic acid, mercury(2+) salt	628-86-4	P065
Metam Sodium	Carbamodithioic acid, methyl-, monosodium salt	137-42-8	
Methacrylonitrile	2-Propenenitrile, 2-methyl-	126-98-7	U152
Methapyrilene	1,2-Ethanediamine, N,N-dimethyl-N'-2-pyridinyl-N'-(2-thienylmethyl)-	91-80-5	U155

Common Name	Chemical Abstracts Name	Chemical Abstracts No.	Hazardous Waste No.
Methiocarb	Phenol, (3,5-dimethyl-4-(methylthio)-,methylcarbamate	2032-65-7	P199
Methomyl	Ethanimidothioic acid, N-[[(methylamino)carbonyl]oxy]-, methyl ester	16752-77-5	P066
Methoxychlor	Benzene, 1,1'-(2,2,2-trichloroethylidene)bis[4-methoxy-	72-43-5	U247
Methyl bromide	Methane, bromo-	74-83-9	U029
Methyl chloride	Methane, chloro-	74-87-3	U045
Methyl chlorocarbonate	Carbonochloridic acid, methyl ester	79-22-1	U156
Methyl chloroform	Ethane, 1,1,1-trichloro-	71-55-6	U226
3-Methylcholanthrene	Benz[j]aceanthrylene, 1,2-dihydro-3-methyl-	56-49-5	U157
4,4'-Methylenebis (2-chloroaniline)	Benzenamine, 4,4'-methylenebis[2-chloro-	101-14-4	U158
Methylene bromide	Methane, dibromo-	74-95-3	U068
Methylene chloride	Methane, dichloro-	75-09-2	U080
Methyl ethyl ketone (MEK)	2-Butanone	78-93-3	U159
Methyl ethyl ketone peroxide	2-Butanone, peroxide	1338-23-4	U160
Methyl hydrazine	Hydrazine, methyl-	60-34-4	P068
Methyl iodide	Methane, iodo-	74-88-4	U138
Methyl isocyanate	Methane, isocyanato-	624-83-9	P064
2-Methyllactonitrile	Propanenitrile, 2-hydroxy-2-methyl-	75-86-5	P069
Methyl methacrylate	2-Propenoic acid, 2-methyl-, methyl ester	80-62-6	U162
Methyl methanesulfonate	Methanesulfonic acid, methyl ester	66-27-3	
Methyl parathion	Phosphorothioic acid, O,O-dimethyl O-(4-nitrophenyl) ester	298-00-0	P071
Methylthiouracil	4(1H)-Pyrimidinone, 2,3-dihydro-6-methyl-2-thioxo-	56-04-2	U164
Metolcarb	Carbamic acid, methyl-, 3-methylphenyl ester	1129-41-5	P190
Mexacarbate	Phenol, 4-(dimethylamino)-3,5-dimethyl-,methylcarbamate (ester)	315-18-4	P128
Mitomycin C	Azirino[2',3':3,4]pyrrolo[1,2-a]indole-4,7-dione, 6-amino-8-[[(aminocarbonyl)oxy]methyl]-1,1a,2,8,8a,8b-hexahydro-8a-methoxy-5-methyl-, [1aS-(1aalpha,8beta,8aalpha,8balpha)]-.	50-07-7	U010
MNNG	Guanidine, N-methyl-N'-nitro-N-nitroso-	70-25-7	U163
Molinate	1H-Azepine-1-carbothioic acid, hexahydro-, S-ethyl ester	2212-67-1	
Mustard gas	Ethane, 1,1'-thiobis[2-chloro-	505-60-2	
Naphthalene	Same	91-20-3	U165
1,4-Naphthoquinone	1,4-Naphthalenedione	130-15-4	U166
alpha-Naphthylamine	1-Naphthalenamine	134-32-7	U167
beta-Naphthylamine	2-Naphthalenamine	91-59-8	U168
alpha-Naphthylthiourea	Thiourea, 1-naphthalenyl-	86-88-4	P072
Nickel	Same	7440-02-0	

Common Name	Chemical Abstracts Name	Chemical Abstracts No.	Hazardous Waste No.
Nickel compounds, N.O.S.[1]			
Nickel carbonyl	Nickel carbonyl $Ni(CO)_4$, (T-4)-	13463-39-3	P073
Nickel cyanide	Nickel cyanide $Ni(CN)_2$	557-19-7	P074
Nicotine	Pyridine, 3-(1-methyl-2-pyrrolidinyl)-, (S)-	54-11-5	P075
Nicotine salts			P075
Nitric oxide	Nitrogen oxide NO	10102-43-9	P076
p-Nitroaniline	Benzenamine, 4-nitro-	100-01-6	P077
Nitrobenzene	Benzene, nitro-	98-95-3	U169
Nitrogen dioxide	Nitrogen oxide NO_2	10102-44-0	P078
Nitrogen mustard	Ethanamine, 2-chloro-N-(2-chloroethyl)-N-methyl-	51-75-2	
Nitrogen mustard, hydrochloride salt			
Nitrogen mustard N-oxide	Ethanamine, 2-chloro-N-(2-chloroethyl)-N-methyl-, N-oxide	126-85-2	
Nitrogen mustard, N-oxide, hydrochloride salt			
Nitroglycerin	1,2,3-Propanetriol, trinitrate	55-63-0	P081
p-Nitrophenol	Phenol, 4-nitro-	100-02-7	U170
2-Nitropropane	Propane, 2-nitro-	79-46-9	U171
Nitrosamines, N.O.S.[1]		35576-91-1D	
N-Nitrosodi-n-butylamine	1-Butanamine, N-butyl-N-nitroso-	924-16-3	U172
N-Nitrosodiethanolamine	Ethanol, 2,2'-(nitrosoimino)bis-	1116-54-7	U173
N-Nitrosodiethylamine	Ethanamine, N-ethyl-N-nitroso-	55-18-5	U174
N-Nitrosodimethylamine	Methanamine, N-methyl-N-nitroso-	62-75-9	PO82
N-Nitroso-N-ethylurea	Urea, N-ethyl-N-nitroso-	759-73-9	U176
N-Nitrosomethylethylamine	Ethanamine, N-methyl-N-nitroso-	10595-95-6	
N-Nitroso-N-methylurea	Urea, N-methyl-N-nitroso-	684-93-5	U177
N-Nitroso-N-methylurethane	Carbamic acid, methylnitroso-, ethyl ester	615-53-2	U178
N-Nitrosomethylvinylamine	Vinylamine, N-methyl-N-nitroso-	4549-40-0	P084
N-Nitrosomorpholine	Morpholine, 4-nitroso-	59-89-2	
N-Nitrosonornicotine	Pyridine, 3-(1-nitroso-2-pyrrolidinyl)-, (S)-	16543-55-8	
N-Nitrosopiperidine	Piperidine, 1-nitroso-	100-75-4	U179
N-Nitrosopyrrolidine	Pyrrolidine, 1-nitroso-	93055-2	U180
N-Nitrososarcosine	Glycine, N-methyl-N-nitroso-	13256-22-9	
5-Nitro-o-toluidine	Benzenamine, 2-methyl-5-nitro-	99-55-8	U181
Octachlorodibenzo-p-dioxin (OCDD)	1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin	3268-87-9	
Octachlorodibenzofuran (OCDF)	1,2,3,4,6,7,8,9-Octachlorodibenzofuran	39001-02-0	
Octamethylpyrophosphoramide	Diphosphoramide, octamethyl-	152-16-9	P085
Osmium tetroxide	Osmium oxide OsO_4, (T-4)-	20816-12-0	P087

Common Name	Chemical Abstracts Name	Chemical Abstracts No.	Hazardous Waste No.
Oxamyl	Ethanimidothioc acid, 2-(dimethylamino)-N-[[(methylamino) carbonyl]oxy]-2-oxo-, methyl ester	23135-22-0	P194
Paraldehyde	1,3,5-Trioxane, 2,4,6-trimethyl-	123-63-7	U182
Parathion	Phosphorothioic acid, O,O-diethyl O-(4-nitrophenyl) ester	56-38-2	P089
Pebulate	Carbamothioic acid, butylethyl-, S-propyl ester	1114-71-2	
Pentachlorobenzene	Benzene, pentachloro-	608-93-5	U183
Pentachlorodibenzo-p-dioxins			
Pentachlorodibenzofurans			
Pentachloroethane	Ethane, pentachloro-	76-01-7	U184
Pentachloronitrobenzene (PCNB)	Benzene, pentachloronitro-	82-68-8	U185
Pentachlorophenol	Phenol, pentachloro-	87-86-5	See F027
Phenacetin	Acetamide, N-(4-ethoxyphenyl)-	62-44-2	U187
Phenol	Same	108-95-2	U188
Phenylenediamine	Benzenediamine	25265-76-3	
Phenylmercury acetate	Mercury, (acetato-O)phenyl-	62-38-4	P092
Phenylthiourea	Thiourea, phenyl-	103-85-5	P093
Phosgene	Carbonic dichloride	75-44-5	P095
Phosphine	Same	7803-51-2	P096
Phorate	Phosphorodithioic acid, O,O-diethyl S-[(ethylthio)methyl] ester	298-02-2	P094
Phthalic acid esters, N.O.S.[1]			
Phthalic anhydride	1,3-Isobenzofurandione	85-44-9	U190
Physostigmine	Pyrrolo[2,3-b]indol-5-01, 1,2,3,3a,8,8a-hexahydro-1,3a,8-trimethyl-, methylcarbamate (ester), (3aS-cis)-	57-47-6	P204
Physostigmine salicylate	Benzoic acid, 2-hydroxy-, compd. with (3aS-cis)-1,2,3,3a,8,8a-hexahydro-1,3a, 8-trimethylpyrrolo[2,3-b]indol-5-yl methylcarbamate ester (1:1).	57-64-7	P188
2-Picoline	Pyridine, 2-methyl-	109-06-8	U191
Polychlorinated biphenyls, N.O.S.[1]			
Potassium cyanide	Potassium cyanide K(CN)	151-50-8	P098
Potassium dimethyl-dithiocarbamate	Carbamodithioic acid, dimethyl, potassium salt	128-03-0	
Potassium n-hydroxymethyl-n-methyl-dithiocarbamate	Carbamodithioic acid, (hydroxymethyl)methyl-, monopotassium salt	51026-28-9	
Potassium n-methyldithiocarbamate	Carbamodithioic acid, methyl-monopotassium salt	137-41-7	U377
Potassium pentachlorophenate	Pentachlorophenol, potassium salt	7778-73-6	
Potassium silver cyanide	Argentate(1-), bis(cyano-C)-, potassium	506-61-6	P099
Promecarb	Phenol, 3-methyl-5-(1-methylethyl)-, methyl carbamate	2631-37-0	P201
Pronamide	Benzamide, 3,5-dichloro-N-(1,1-dimethyl-2-propynyl)-	23950-58-5	U192

Common Name	Chemical Abstracts Name	Chemical Abstracts No.	Hazardous Waste No.
1,3-Propane sultone	1,2-Oxathiolane, 2,2-dioxide	1120-71-4	U193
Propham	Carbamic acid, phenyl-,1-methylethyl ester	122-42-9	U373
n-Propylamine	1-Propanamine	107-10-8	U194
Propargyl alcohol	2-Propyn-1-ol	107-19-7	P102
Propylene dichloride	Propane, 1,2-dichloro-	78-87-5	U083
1,2-Propylenimine	Aziridine, 2-methyl-	75-55-8	P067
Propylthiouracil	4(1H)-Pyrimidinone, 2,3-dihydro-6-propyl-2-thioxo-	51-52-5	
Propoxur	Phenol, 2-(1-methylethoxy)-,methylcarbamate	114-26-1	U411
Prosulfocarb	Carbamothioic acid, dipropyl-, S-(phenylmethyl) ester	52888-80-9	U387
Pyridine	Same	110-86-1	U196
Reserpine	Yohimban-16-carboxylic acid, 11,17-dimethoxy-18-[(3,4,5-trimethoxybenzoyl) oxy]-smethyl ester, (3beta,16beta,17alpha, 18beta,20alpha)-	50-55-5	U200
Resorcinol	1,3-Benzenediol	108-46-3	U201
Saccharin	1,2-Benzisothiazol-3(2H)-one, 1,1-dioxide	81-07-2	U202
Saccharin salts			U202
Safrole	1,3-Benzodioxole, 5-(2-propenyl)-	94-59-7	U203
Selenium	Same	7782-49-2	
Selenium compounds, N.O.S.[1]			
Selenium dioxide	Selenious acid	7783-00-8	U204
Selenium sulfide	Selenium sulfide SeS_2	7488-56-4	U205
Selenium, tetrakis (dimethyl-dithiocarbamate)	Carbamodithioic acid, dimethyl-, tetraanhydro-sulfide with orthothioselenious acid	144-34-3	
Selenourea	Same	630-10-4	P103
Silver	Same	7440-22-4	
Silver compounds, N.O.S.[1]			
Silver cyanide	Silver cyanide Ag(CN)	506-64-9	P104
Silvex (2,4,5-TP)	Propanoic acid, 2-(2,4,5-trichlorophenoxy)-	93-72-1	See F027
Sodium cyanide	Sodium cyanide Na(CN)	143-33-9	P106
Sodium dibutyldithiocarbamate	Carbamodithioic acid, dibutyl, sodium salt	136-30-1	
Sodium diethyldithiocarbamate	Carbamodithioic acid, diethyl-, sodium salt	148-18-5	
Sodium dimethyldithiocarbamate	Carbamodithioic acid, dimethyl-, sodium salt	128-04-1	
Sodium pentachlorophenate	Pentachlorophenol, sodium salt	131-52-2	
Streptozotocin	D-Glucose, 2-deoxy-2-[[(methylnitrosoamino)carbonyl]amino]-	18883-66-4	U206
Strychnine	Strychnidin-10-one	57-24-9	P108
Strychnine salts			P108
Sulfallate	Carbamodithioic acid, diethyl-, 2-chloro-2-propenyl ester	95-06-7	
TCDD	Dibenzo[b,e][1,4]dioxin, 2,3,7,8-tetrachloro-	1746-01-6	

Common Name	Chemical Abstracts Name	Chemical Abstracts No.	Hazardous Waste No.
Tetrabutylthiuram disulfide	Thioperoxydicarbonic diamide, tetrabutyl	1634-02-2	
Tetramethylthiuram monosulfide	Bis (dimethylthiocarbamoyl) sulfide	97-74-5	
1,2,4,5-Tetrachlorobenzene	Benzene, 1,2,4,5-tetrachloro-	95-94-3	U207
Tetrachlorodibenzo-p-dioxins			
Tetrachlorodibenzofurans			
Tetrachloroethane, N.O.S.[1]	Ethane, tetrachloro-, N.O.S.	25322-20-7	
1,1,1,2-Tetrachloroethane	Ethane, 1,1,1,2-tetrachloro-	630-20-6	U208
1,1,2,2-Tetrachloroethane	Ethane, 1,1,2,2-tetrachloro-	79-34-5	U209
Tetrachloroethylene	Ethene, tetrachloro-	127-18-4	U210
2,3,4,6-Tetrachlorophenol	Phenol, 2,3,4,6-tetrachloro-	58-90-2	See F027
2,3,4,6-Tetrachlorophenol, potassium salt	Same	53535-27-6	
2,3,4,6-Tetrachlorophenol, sodium salt	Same	25567-55-9	
Tetraethyldithiopyrophosphate	Thiodiphosphoric acid, tetraethyl ester	3689-24-5	P109
Tetraethyl lead	Plumbane, tetraethyl-	78-00-2	P110
Tetraethyl pyrophosphate	Diphosphoric acid, tetraethyl ester	107-49-3	P111
Tetranitromethane	Methane, tetranitro-	509-14-8	P112
Thallium	Same	7440-28-0	
Thallium compounds, N.O.S.[1]			
Thallic oxide	Thallium oxide Tl_2O_3	1314-32-5	P113
Thallium(I) acetate	Acetic acid, thallium(1+) salt	563-68-8	U214
Thallium(I) carbonate	Carbonic acid, dithallium(1+) salt	6533-73-9	U215
Thallium(I) chloride	Thallium chloride TICI	7791-12-0	U216
Thallium(I) nitrate	Nitric acid, thallium(1+) salt	10102-45-1	U217
Thallium selenite	Selenious acid, dithallium(1+) salt	12039-52-0	P114
Thallium(I) sulfate	Sulfuric acid, dithallium(1+) salt	7446-18-6	P115
Thioacetamide	Ethanethioamide	62-55-5	U218
Thiodicarb	Ethanimidothioic acid, N,N'-[thiobis[(methylimino) carbonyloxy]] bis-, dimethyl ester	59669-26-0	U410
Thiofanox	2-Butanone, 3,3-dimethyl-1-(methylthio)-, 0-[(methylamino)carbonyl] oxime	39196-18-4	P045
Thiomethanol	Methanethiol	74-93-1	U153
Thiophanate-methyl	Carbamic acid, [1,2-phyenylenebis (iminocarbonothioyl)] bis-, dimethyl ester	23564-05-8	U409
Thiophenol	Benzenethiol	108-98-5	P014
Thiosemicarbazide	Hydrazinecarbothioamide	79-19-6	P116
Thiourea	Same	62-56-6	U219
Thiram	Thioperoxydicarbonic diamide $[(H_2N)C(S)]_2S_2$,tetramethyl-	137-26-8	U244
Tirpate	1,3-Dithiolane-2-carboxaldehyde, 2,4-dimethyl-, O-[(methylamino) carbonyl] oxime.	26419-73-8	P185
Toluene	Benzene, methyl-	108-88-3	U220

Common Name	Chemical Abstracts Name	Chemical Abstracts No.	Hazardous Waste No.
Toluenediamine	Benzenediamine, ar-methyl-	25376-45-8	U221
Toluene-2,4-diamine	1,3-Benzenediamine, 4-methyl-	95-80-7	
Toluene-2,6-diamine	1,3-Benzenediamine, 2-methyl-	823-40-5	
Toluene-3,4-diamine	1,2-Benzenediamine, 4-methyl-	496-72-0	
Toluene diisocyanate	Benzene, 1,3-diisocyanatomethyl-	26471-62-5	U223
o-Toluidine	Benzenamine, 2-methyl-	95-53-4	U328
o-Toluidine hydrochloride	Benzenamine, 2-methyl-, hydrochloride	636-21-5	U222
p-Toluidine	Benzenamine, 4-methyl-	106-49-0	U353
Toxaphene	Same	8001-35-2	P123
Triallate	Carbamothioic acid, bis(1-methylethyl)-, S-(2,3,3-trichloro-2-propenyl) ester	2303-17-5	U389
1,2,4-Trichlorobenzene	Benzene, 1,2,4-trichloro-	120-82-1	
1,1,2-Trichloroethane	Ethane, 1,1,2-trichloro-	79-00-5	U227
Trichloroethylene	Ethene, trichloro-	79-01-6	U228
Trichloromethanethiol	Methanethiol, trichloro-	75-70-7	P118
Trichloromonofluoromethane	Methane, trichlorofluoro-	75-69-4	U121
2,4,5-Trichlorophenol	Phenol, 2,4,5-trichloro-	95-95-4	See F027
2,4,6-Trichlorophenol	Phenol, 2,4,6-trichloro-	88-06-2	See F027
2,4,5-T	Acetic acid, (2,4,5-trichlorophenoxy)-	93-76-5	See F027
Trichloropropane, N.O.S.[1]		25735-29-9	
1,2,3-Trichloropropane	Propane, 1,2,3-trichloro-	96-18-4	
Triethylamine	Ethanamine, N,N-diethyl-	121-44-8	U404
O,O,O-Triethyl phosphorothioate	Phosphorothioic acid, O,O,O-triethyl ester	126-68-1	
1,3,5-Trinitrobenzene	Benzene, 1,3,5-trinitro-	99-35-4	U234
Tris(1-aziridinyl) phosphine sulfide	Aziridine, 1,1',1"-phosphinothioylidynetris-	52-24-4	
Tris(2,3-dibromopropyl) phosphate	1-Propanol, 2,3-dibromo-, phosphate (3:1)	126-72-7	U235
Trypan blue	2,7-Naphthalenedisulfonic acid, 3,3'-[(3,3'-dimethyl[1,1'-biphenyl]-4,4'diyl) bis(azo)]- bis[5-amino-4-hydroxy-, tetrasodium salt.	72-57-1	U236
Uracil mustard	2,4-(1H,3H)-Pyrimidinedione, 5-[bis(2-chloroethyl)amino]-	66-75-1	U237
Vanadium pentoxide	Vanadium oxide V_2O_5	1314-62-1	P120
Vernolate	Carbamothioic acid, dipropyl-, S-propyl ester	1929-77-7	
Vinyl chloride	Ethene, chloro-	75-01-4	U043
Warfarin	2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenylbutyl)-, when present at concentrations less than 0.3%	81-81-2	U248
Warfarin	2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenylbutyl)-, when present at concentrations greater than 0.3%	81-81-2	P001
Warfarin salts, when present at concentrations less than 0.3%			U248

Common Name	Chemical Abstracts Name	Chemical Abstracts No.	Hazardous Waste No.
Warfarin salts, when present at concentrations greater than 0.3%			P001
Zinc cyanide	Zinc cyanide $Zn(CN)_2$	557-21-1	P121
Zinc phosphide	Zinc phosphide Zn_3P_2, when present at concentrations greater than 10%	1314-84-7	P122
Zinc phosphide	Zinc phosphide Zn_3P_2, when present at concentrations of 10% or less	1314-84-7	U249
Ziram	Zinc, bis(dimethylcarbamodithioato -S,S')-, (T-4)-	137-30-4	P205

FOOTNOTE: [1]The abbreviation N.O.S. (not otherwise specified) signifies those members of the general class not specifically listed by name in this appendix.

APPENDIX VI

Excluded Under Sections 33-24-01-06 and 33-24-01-08

Table 1. Wastes Excluded From Nonspecific Sources.

Facility	Address	Waste Description

[Reserved]

Table 2. Wastes Excluded From Specific Sources.

Facility	Address	Waste Description

[Reserved]

Table 3. Wastes Excluded From Commercial Chemical Products, Off-Specification Species, Container Residues, and Soil Residues Thereof.

Facility	Address	Waste Description

[Reserved]

APPENDIX VII

[Reserved]